SEQUENCE LISTING

<110> ChondroGene
      Liew, Choong-Chin

<120> Method for the Detection of Gene Transcripts in Blood and Uses
      Thereof

<130> xx

<150> US
<151> 2000-01-04

<150> US 60/115,125
<151> 1999-01-06

<160> 112

<170> PatentIn version 3.2

<210> 1
<211> 110
<212> DNA
<213> Human

<400> 1
acacaacgta acaataacat atttagccaa tgtagtagac tgctatataa tacattagag   60

tgtcaattca ttccgtttac agccccattg ggtgtcaaat ttttttttgtt   110

<210> 2
<211> 530
<212> DNA
<213> Human

<220>
<221> misc_feature
<222> (16)..(16)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (19)..(19)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (25)..(25)
<223> n is a, c, g, or t

5

<220>
<221> misc_feature
<222> (38)..(38)
<223> n is a, c, g, or t

10

<220>
<221> misc_feature
<222> (40)..(40)
<223> n is a, c, g, or t

15

<220>
<221> misc_feature
<222> (42)..(42)
<223> n is a, c, g, or t

20

<220>
<221> misc_feature
<222> (44)..(44)
<223> n is a, c, g, or t

25

<220>
<221> misc_feature
<222> (64)..(66)
<223> n is a, c, g, or t

30

<220>
<221> misc_feature
<222> (70)..(71)
<223> n is a, c, g, or t

35

<220>
<221> misc_feature
<222> (81)..(81)
<223> n is a, c, g, or t

40

<220>
<221> misc_feature
<222> (86)..(86)
<223> n is a, c, g, or t

45

<220>
<221> misc_feature

<222> (89)..(89)
<223> n is a, c, g, or t

<220>
5 <221> misc_feature
<222> (117)..(117)
<223> n is a, c, g, or t

<220>
10 <221> misc_feature
<222> (121)..(121)
<223> n is a, c, g, or t

<220>
15 <221> misc_feature
<222> (123)..(123)
<223> n is a, c, g, or t

<220>
20 <221> misc_feature
<222> (135)..(135)
<223> n is a, c, g, or t

<220>
25 <221> misc_feature
<222> (143)..(143)
<223> n is a, c, g, or t

<220>
30 <221> misc_feature
<222> (177)..(177)
<223> n is a, c, g, or t

<220>
35 <221> misc_feature
<222> (179)..(179)
<223> n is a, c, g, or t

<220>
40 <221> misc_feature
<222> (181)..(181)
<223> n is a, c, g, or t

<220>
45 <221> misc_feature
<222> (193)..(194)
<223> n is a, c, g, or t

```
<220>
<221> misc_feature
<222> (209)..(210)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (215)..(215)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (217)..(217)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (221)..(221)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (228)..(228)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (233)..(233)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (236)..(236)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (243)..(243)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (251)..(254)
<223> n is a, c, g, or t

<220>
```

```
<221> misc_feature
<222> (270)..(270)
<223> n is a, c, g, or t
```

5
```
<220>
<221> misc_feature
<222> (272)..(272)
<223> n is a, c, g, or t
```

10
```
<220>
<221> misc_feature
<222> (274)..(275)
<223> n is a, c, g, or t
```

15
```
<220>
<221> misc_feature
<222> (283)..(283)
<223> n is a, c, g, or t
```

20
```
<220>
<221> misc_feature
<222> (292)..(293)
<223> n is a, c, g, or t
```

25
```
<220>
<221> misc_feature
<222> (299)..(299)
<223> n is a, c, g, or t
```

30
```
<220>
<221> misc_feature
<222> (303)..(303)
<223> n is a, c, g, or t
```

35
```
<220>
<221> misc_feature
<222> (307)..(307)
<223> n is a, c, g, or t
```

40
```
<220>
<221> misc_feature
<222> (312)..(312)
<223> n is a, c, g, or t
```

45
```
<220>
<221> misc_feature
<222> (319)..(319)
```

<223> n is a, c, g, or t

<220>
<221> misc_feature
5   <222> (324)..(325)
<223> n is a, c, g, or t

<220>
<221> misc_feature
10   <222> (328)..(329)
<223> n is a, c, g, or t

<220>
<221> misc_feature
15   <222> (342)..(342)
<223> n is a, c, g, or t

<220>
<221> misc_feature
20   <222> (345)..(345)
<223> n is a, c, g, or t

<220>
<221> misc_feature
25   <222> (366)..(366)
<223> n is a, c, g, or t

<220>
<221> misc_feature
30   <222> (377)..(377)
<223> n is a, c, g, or t

<220>
<221> misc_feature
35   <222> (382)..(382)
<223> n is a, c, g, or t

<220>
<221> misc_feature
40   <222> (391)..(391)
<223> n is a, c, g, or t

<220>
<221> misc_feature
45   <222> (395)..(395)
<223> n is a, c, g, or t

```
<220>
<221> misc_feature
<222> (400)..(400)
<223> n is a, c, g, or t

5
<220>
<221> misc_feature
<222> (412)..(413)
<223> n is a, c, g, or t

10
<220>
<221> misc_feature
<222> (422)..(422)
<223> n is a, c, g, or t

15
<220>
<221> misc_feature
<222> (424)..(424)
<223> n is a, c, g, or t

20
<220>
<221> misc_feature
<222> (426)..(426)
<223> n is a, c, g, or t

25
<220>
<221> misc_feature
<222> (433)..(433)
<223> n is a, c, g, or t

30
<220>
<221> misc_feature
<222> (439)..(439)
<223> n is a, c, g, or t

35
<220>
<221> misc_feature
<222> (442)..(442)
<223> n is a, c, g, or t

40
<220>
<221> misc_feature
<222> (452)..(452)
<223> n is a, c, g, or t

45
<220>
<221> misc_feature
```

<222> (460)..(460)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (463)..(463)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (471)..(471)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (495)..(495)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (500)..(500)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (504)..(504)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (516)..(516)
<223> n is a, c, g, or t

<400> 2
gcctgttcta tacagnttnt aaatntcatt tcagatcntn tntntgtgat aatgaatgct   60

gttnnntagn natcctatat natgtncgna cacatcctaa agcataggat gaaaaantga   120

nanccttagg atttngagca cantgccttt acctgaatat atacagcaca gttctgnant   180

ncctggcgtg tgnnactgga gatctctann aaaangnata nagtgggngg gcnctntggc   240

gcntgccggt nnnncctaaa ttttccccan gngnnggagg ccngtcacct gnncccatng   300

cgntctngac cngcctgtna acgnntanng gagccttagt cnctnctaaa aacacaaaat   360

tagccnggca tgggggntgg gncccttgta ntctnagctn cttgggaggc tnngccagga   420

3186

antncncttg aanccgggna gngggtggcc tnaagtttgn ggnaaggcca ntgatcaccg   480

cccccttcccc tccangcccn gggngaaggg atttgngact tccgtttttgg   530

<210> 3
<211> 215
<212> DNA
<213> Human

<400> 3
cggcacgagg atcaatttgc cttggaagaa caaaaggaaa gtctggaaat gcagaaagta   60

tggatgctga accacataac agcagatggc attgctgtga agtatactgg atggaataca   120

ttcaagcgtt aatatttaat tcttttttgtg gaaggtcaca caattaaaat ttaattgggc   180

atggaggctt aggacggggt aaaaaagtct ttaga   215

<210> 4
<211> 129
<212> DNA
<213> Human

<400> 4
gtttcttttt cctaaaacgg ttttatttaa ctcaatgtgt caaagttttt ttttaataat   60

cccaagaggg atgaagccgt gtccacaggg atatatacat cattatggtt cccatctttc   120

atacatgaa   129

<210> 5
<211> 361
<212> DNA
<213> Human

<220>
<221> misc_feature
<222> (13)..(14)
<223> n is a, c, g, or t

<220>
<221> misc_feature

3187

<222> (16)..(16)
<223> n is a, c, g, or t

<220>
5   <221> misc_feature
<222> (20)..(21)
<223> n is a, c, g, or t

<220>
10   <221> misc_feature
<222> (25)..(28)
<223> n is a, c, g, or t

<220>
15   <221> misc_feature
<222> (42)..(42)
<223> n is a, c, g, or t

<220>
20   <221> misc_feature
<222> (52)..(52)
<223> n is a, c, g, or t

<220>
25   <221> misc_feature
<222> (55)..(55)
<223> n is a, c, g, or t

<220>
30   <221> misc_feature
<222> (57)..(57)
<223> n is a, c, g, or t

<220>
35   <221> misc_feature
<222> (59)..(59)
<223> n is a, c, g, or t

<220>
40   <221> misc_feature
<222> (63)..(63)
<223> n is a, c, g, or t

<220>
45   <221> misc_feature
<222> (65)..(65)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (68)..(68)
5   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (72)..(72)
10 <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (74)..(74)
15 <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (77)..(77)
20 <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (91)..(91)
25 <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (102)..(102)
30 <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (117)..(117)
35 <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (127)..(128)
40 <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (169)..(169)
45 <223> n is a, c, g, or t

<220>

<221> misc_feature
<222> (172)..(172)
<223> n is a, c, g, or t

5   <220>
<221> misc_feature
<222> (192)..(192)
<223> n is a, c, g, or t

10   <220>
<221> misc_feature
<222> (203)..(203)
<223> n is a, c, g, or t

15   <220>
<221> misc_feature
<222> (243)..(244)
<223> n is a, c, g, or t

20   <220>
<221> misc_feature
<222> (248)..(249)
<223> n is a, c, g, or t

25   <220>
<221> misc_feature
<222> (253)..(253)
<223> n is a, c, g, or t

30   <220>
<221> misc_feature
<222> (283)..(283)
<223> n is a, c, g, or t

35   <220>
<221> misc_feature
<222> (288)..(288)
<223> n is a, c, g, or t

40   <220>
<221> misc_feature
<222> (299)..(299)
<223> n is a, c, g, or t

45   <220>
<221> misc_feature
<222> (318)..(318)

<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (327)..(327)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (334)..(334)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (348)..(348)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (359)..(360)
<223> n is a, c, g, or t

<400> 5
gggggctttt ttnnancggn nccgnnnncc cttcctggga anttttgggc cnttntntna   60

aangnggnct tncnggnaaa tgggtttttt naggggctg gncaaaggtt ttttctntaa   120

tgggatnngg ccggcatttt aaaaaaaccc gctttggcct ttttgctana tnggaaaaaa   180

tttttttaaa angcctaaga canggttttc ccttcatatg ccaaactttc cctaacattt   240

ggnntttnng ggngggcagg gggggatttt taaaccggat ttngggtnaa aaaaaatcng   300

gggggaattt ttgggganaa aaccttnggg gggnccccct ttgaaaanaa agggtgggnn   360

g   361

<210> 6
<211> 839
<212> DNA
<213> Human

<220>
<221> misc_feature
<222> (475)..(475)

<223> n is a, c, g, or t

<220>
<221> misc_feature
5   <222> (556)..(556)
<223> n is a, c, g, or t

<220>
<221> misc_feature
10   <222> (559)..(559)
<223> n is a, c, g, or t

<220>
<221> misc_feature
15   <222> (585)..(585)
<223> n is a, c, g, or t

<220>
<221> misc_feature
20   <222> (606)..(606)
<223> n is a, c, g, or t

<220>
<221> misc_feature
25   <222> (644)..(644)
<223> n is a, c, g, or t

<220>
<221> misc_feature
30   <222> (671)..(671)
<223> n is a, c, g, or t

<220>
<221> misc_feature
35   <222> (693)..(693)
<223> n is a, c, g, or t

<220>
<221> misc_feature
40   <222> (695)..(695)
<223> n is a, c, g, or t

<220>
<221> misc_feature
45   <222> (714)..(714)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (742)..(742)
<223> n is a, c, g, or t

5

<220>
<221> misc_feature
<222> (744)..(744)
<223> n is a, c, g, or t

10

<220>
<221> misc_feature
<222> (756)..(756)
<223> n is a, c, g, or t

15

<220>
<221> misc_feature
<222> (765)..(765)
<223> n is a, c, g, or t

20

<220>
<221> misc_feature
<222> (768)..(768)
<223> n is a, c, g, or t

25

<220>
<221> misc_feature
<222> (808)..(808)
<223> n is a, c, g, or t

30

<220>
<221> misc_feature
<222> (815)..(815)
<223> n is a, c, g, or t

35

<220>
<221> misc_feature
<222> (823)..(823)
<223> n is a, c, g, or t

40

<220>
<221> misc_feature
<222> (830)..(830)
<223> n is a, c, g, or t

45

<220>
<221> misc_feature

<222> (837)..(837)
<223> n is a, c, g, or t

<400> 6
ctcgtgccga attcggcacg agcaaagtac ctggacttta tggaatcctt ctatacttca   60

ttgtcaatca tttattggtt ctaaaaagga tcggacaatg tgctatttca gggaagccaa   120

tgttttggag taaaatgcac aaataatttc tcttgccttg caaacacatt ttttttttctg   180

tcattgcaat gtgcacaaag ggccacgagg atctacaaga aagcctgcct tattctgacc   240

aggagtgggg agctgacaag aggcttcaca gagcaggtga tgtttagaga ggaatgtctc   300

ccatttccta gtagcctgtg aggctctcaa aaccgggaat caagtttccc ttctgaactc   360

agttctcaat cgtgtaggga tagggttccc aggtgtgcct ctatgtgtag aggctctatt   420

ataccctgga tacacattga tatgcatgtg caatgctgga atcaccagcc cccangtcct   480

cctcccaaat gtgcatgttt tttgacccat gtcacattta attttttttt tcaattgacg   540

ggttttagg gcaaanttnc caaaacatcc cccactttgc catantcccc tgtcattcca   600

tattgncttg cactgacatg attcactcat tgatattgcc tgtngcgttc ctatggcctt   660

tgagtttgca nactgggttt gggggaaacc cangnaaaaa aacctctttg aaanggggaa   720

ccccccccaat ggtgggggaa ananaactgg actttntttg ggagnccnga atttgctctt   780

gaccaggcag ggacctggga ccctgaangc ttttntaatc ttnggggccn gaaaatntg   839

<210> 7
<211> 118
<212> DNA
<213> Human

<400> 7
atgggaaagt gtgtaagatt tagaaaaagc attaactatt agtaaacttt atcttaagct   60

ctaacctttg attaggtccc acaaaaatta ggtgatatgc aatttctaat ttagggcc   118

<210> 8
<211> 197
<212> DNA

gttgcagtga gccgagatca taccactgca ctccagccta ggcaacagag cgagactcgg   60

tcaaaagaaa aaaaaaaagg ggagctgggc gtgggtacta atgccgtaat cccaggcctt   120

tgggaatccc aggcaaggtg gcctttaggg caaggagttc ggaacctccc tgctaacagg   180

taaacccccct ttccctt   197

gagaccaagg ccgccccgct ctggtctcag accagttgtg ctgctcttgc tctggctcag   60

ctggtgtggg gcgcaggcgg gaaacgagac ctctagcatc tggctgaagg ctctgccaag   120

ctcctcttca gggctgcagt ctgcctgcct gcatataccg acttggccag acactgctgc   180

taaattccag ggactctttc tcccctcctc tgctctccag ccaatccttg aggatttaat   240

aactggaagg   250

<222> (615)..(615)
<223> n is a, c, g, or t

<220>
5   <221> misc_feature
<222> (626)..(626)
<223> n is a, c, g, or t

<220>
10 <221> misc_feature
<222> (645)..(645)
<223> n is a, c, g, or t

<220>
15 <221> misc_feature
<222> (661)..(661)
<223> n is a, c, g, or t

<400> 10
20 caccaaagaa gcaagagggc tttcttttgt ttctggggac aataactaac tttaatttgc   60

tcttcaagaa gaaggaagct gggtatatag gggaatggca gaagtgctcg cagatgaacc   120

atgaggagca tggtctttaa gaacatgctg agaaggaagc aacacagact ccatcactgg   180
25
gggaagcacc tgaatagagc actggtaaag gccagtctgt ggacctgagg ccagaggaga   240

tgccaggggt ccagatttca tggcccacag aaacggaact gatcatattt ggttgctggc   300

30 cagtgttcca tagaccaaga aggctggtag caagtataga ttcctctaca tagcttgaca   360

ggagaagaga aaggggaatg tagcacacag gatgcagcag gtgaataaga aaacctcctt   420

ttcccaggtt ggngacagtg agtgatctac agtgatactc aaaagattgt gattggtgtg   480
35
ggaattcctg tctcaatatg caatctgcca agaaaacact gtgatggttt cctgtaaagt   540

aaccctcttt tcttatctct aatttcacaa gactcttaaa tgagaggggg gggagaaagn   600

40 gttctttctc actcncctaa aactgngggt ctgcctggag aaaanctaca tctgcacaga   660

naatgctggt tagccaggaa   680

45 <210> 11
<211> 318
<212> DNA

<400> 11
cctgcagagt actccatgga aacaattgcc gagcacgtgc tcgcaatttg ccgagcacgg   60

tccggtttga actcctagac taagactagg taggtgatac ataccttctt cccaccaagt   120

actcacgatc caaactatga attttagatt cggatcaaac gaggattgat ccgagggacc   180

aacgttgtga taaatcttac gtcgtcttat atattaagtt tttgtggagg atcggataag   240

tctatagtgt ttgtcacaga tagtcccgta ccacacccca gaccatagga gtcgctctcc   300

ggaccgcggt ctaatggg   318

<210> 12
<211> 155
<212> DNA
<213> Human

<400> 12
tctcacattg gacatactca aaattcactt ataatcttca caccaccaaa aacttaccca   60

tatcaaatta taaacccacc cacattactt aaaatttttt acatttccca ataaaaaacc   120

caaataaaca aaaacttcca atctccattt aaaat   155

<210> 13
<211> 125
<212> DNA
<213> Human

<400> 13
aataaacaaa catgccctct aatatatgaa ttcatcacac aacacgcaca ctgtccccac   60

aaacaccttt ttggtgtcaa gaagaaaaag actagcttca ctgaacagag aaatgctgga   120

cagtg   125

<210> 14
<211> 168
<212> DNA
<213> Human

<220>
<221> misc_feature
<222> (6)..(6)
5   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (15)..(15)
10   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (37)..(38)
15   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (47)..(47)
20   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (56)..(57)
25   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (94)..(94)
30   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (127)..(127)
35   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (155)..(155)
40   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (157)..(157)
45   <223> n is a, c, g, or t

<400> 14

ggcccntggg ggggnagggc cttttcgggg ccggggnngg gcccccnttt ggcccnnggg   60

gggtttcccg gggaacccaa ccctttaagg ggtnggggggg aatttccccc caaaaaaagg   120

gaaaaantt tccgggggggc ccacccggga agggntnccg gggaaggg   168

<210> 15
<211> 438
<212> DNA
<213> Human

<400> 15
aaaaaacttc tttatagtcc ttatatattt ttaattgttt atgttagggg aagctataga   60

ggaacaaatt tgggatagaa atataaggct gggattacag gcatgagcca ccaagcccgg   120

cccacatttc cattttaat atatactgtg ctttacaaat attataatat gttttaaaat   180

atgttcacag aagcacctgg tctgtgaatg gcatgccagc attaaaaaaa ataagcattc   240

tttgaatata tatttagttt tttaatgtgg taggaaaatc aaagccagag ggagtagaaa   300

caaaatttgt gattttctaa atacttcttg gctgcaggga agaaaccacg tcccaggcga   360

agtcctacct aatttgatga taaaattaca tggaagggat tcttgttggc atgaggacct   420

accaagatgg tcaacaga   438

<210> 16
<211> 235
<212> DNA
<213> Human

<220>
<221> misc_feature
<222> (5)..(5)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (15)..(15)
<223> n is a, c, g, or t

<220>

<221> misc_feature
<222> (39)..(39)
<223> n is a, c, g, or t

5   <220>
<221> misc_feature
<222> (47)..(47)
<223> n is a, c, g, or t

10   <220>
<221> misc_feature
<222> (52)..(52)
<223> n is a, c, g, or t

15   <220>
<221> misc_feature
<222> (69)..(69)
<223> n is a, c, g, or t

20   <220>
<221> misc_feature
<222> (154)..(154)
<223> n is a, c, g, or t

25   <220>
<221> misc_feature
<222> (207)..(207)
<223> n is a, c, g, or t

30   <220>
<221> misc_feature
<222> (217)..(217)
<223> n is a, c, g, or t

35   <400> 16
aaggnctttt ccggnccggc ccggcccccc ttggcccang ggggttnccg gnaaaccacc   60

ctttaaggnt tgggggaatt cccccaaaaa aggaaaaaat tttcccgggg gcccacccgg   120

40   aaaggggggaa ggcccccaaa accggggggg gggnaaaaag gtgggtttcc ccctttttcc   180

aattcccaaa accaatttcc aaaaggnaaa ccaaccnttc ccaaaatggg aaagg   235

45   <210> 17
<211> 294
<212> DNA

3200

<213> Human

<220>
<221> misc_feature
<222> (18)..(19)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (27)..(27)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (47)..(47)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (66)..(66)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (76)..(76)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (82)..(82)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (108)..(108)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (133)..(133)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (162)..(162)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (210)..(210)
5   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (260)..(260)
10 <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (276)..(276)
15 <223> n is a, c, g, or t

<400> 17
aaaccaaccc tttaaggnnt gggggggnaat tccccccaaa aaaaggnaaa aatttttttcc   60

20   ggggggnccaa accggnaaag gntttgggaa aaccaaattt tttttggncc caacccccccc   120

caaattggggg ggnaaaccaa atttaagggg ggaaggggggg gnccccccccg ggaaaggccc   180

aaggggggaa aattttttccg ggggtggggtn ggggggaacca atttaagggg ggggcccccg   240
25
gggggggttcc ccttgggccn ttttttcctttt tgggtnaaaa aaaaaaaccc cttg   294

<210> 18
30 <211> 453
<212> DNA
<213> Human

<400> 18
35 gtagaatata gggtgatact ggagatctac tgcgacctag accatgatac ataaccacac   60

aagtttaatc cctgggttct aactaccctt actgtcactt agcttaacct gcctccaatc   120

ctgtacttga actctaaaac tgttggagaa actcagtgct taccccaaca gattcatttc   180
40
aaatagctgt aaaaggtatg tttactccag aagaccagag ttgcttcttt tgaacttctc   240

attccttggg cctaggaacc ctcatcaccc tcatcccaac gtcaacccag atcttctctt   300

45 ccataaacag cactccctca ggcccctgcc tgacacaggc atagactgtc atgttggatt   360

cacagacagg ctgtgctaga ggaaacctct ggggctcacc aggggccgtg ggatgggctt   420

3202

ctggggcttc ttggagccca acttcttcat ggc   453

<210> 19
<211> 242
<212> DNA
<213> Human

10

<220>
<221> misc_feature
<222> (17)..(17)
<223> n is a, c, g, or t

15

<220>
<221> misc_feature
<222> (40)..(40)
<223> n is a, c, g, or t

20

<220>
<221> misc_feature
<222> (59)..(59)
<223> n is a, c, g, or t

25

<220>
<221> misc_feature
<222> (76)..(76)
<223> n is a, c, g, or t

30

<220>
<221> misc_feature
<222> (107)..(107)
<223> n is a, c, g, or t

35

<220>
<221> misc_feature
<222> (165)..(165)
<223> n is a, c, g, or t

40

<220>
<221> misc_feature
<222> (189)..(189)
<223> n is a, c, g, or t

45

<220>
<221> misc_feature

<222> (216)..(216)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (221)..(221)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (230)..(230)
<223> n is a, c, g, or t

<400> 19
gagtcagact gtaaggnacg aaccctcggg gtccccacgn tgttcccccc ggggtaacnt   60

cggcccgggc ccgggnagcc cttcccgggc ttttcccccg gggggncccc gggggggacc   120

tttaggcggc accccaacaa caccaggccc tactttttcc aaggncgggg aagcccatgg   180

gttctgggna cgggcaatg cgggcttgca acgggnggaa naaaaacagn cccaaaagaa   240

tg   242

<210> 20
<211> 181
<212> DNA
<213> Human

<400> 20
gtttgtttgt ttttgagatg aatctcactc tgtcgcccag gctggaatgc agtggtgtga   60

tctcagctca ctgcaacctc cacctctcag gagaattgct gaacctggga ggcggaggtt   120

gcagggagct gagattgcgc cactgccctc catcctgggc gacagagcaa gaacctgtct   180

c   181

<210> 21
<211> 100
<212> DNA
<213> Human

<220>

<210> misc_feature
<222> (17)..(17)
<223> n is a, c, g, or t

5   <220>
<221> misc_feature
<222> (23)..(23)
<223> n is a, c, g, or t

10   <220>
<221> misc_feature
<222> (28)..(28)
<223> n is a, c, g, or t

15   <220>
<221> misc_feature
<222> (36)..(36)
<223> n is a, c, g, or t

20   <220>
<221> misc_feature
<222> (41)..(41)
<223> n is a, c, g, or t

25   <220>
<221> misc_feature
<222> (44)..(44)
<223> n is a, c, g, or t

30   <220>
<221> misc_feature
<222> (53)..(53)
<223> n is a, c, g, or t

35   <220>
<221> misc_feature
<222> (59)..(59)
<223> n is a, c, g, or t

40   <220>
<221> misc_feature
<222> (62)..(62)
<223> n is a, c, g, or t

45   <220>
<221> misc_feature
<222> (67)..(67)

<223> n is a, c, g, or t

<220>
<221> misc_feature
5 <222> (70)..(71)
<223> n is a, c, g, or t

<220>
<221> misc_feature
10 <222> (74)..(74)
<223> n is a, c, g, or t

<220>
<221> misc_feature
15 <222> (76)..(76)
<223> n is a, c, g, or t

<220>
<221> misc_feature
20 <222> (79)..(79)
<223> n is a, c, g, or t

<220>
<221> misc_feature
25 <222> (83)..(84)
<223> n is a, c, g, or t

<220>
<221> misc_feature
30 <222> (86)..(86)
<223> n is a, c, g, or t

<220>
<221> misc_feature
35 <222> (97)..(97)
<223> n is a, c, g, or t

<400> 21
gcacaaggaa gggtggncag atnttccngc actggnaaaa ngcngctatg gtngtgaant   60
40
tnccccnccn nttnanacna aanntngcac tcttggntgc   100

<210> 22
45 <211> 100
<212> DNA
<213> Human

<220>
<221> misc_feature
5   <222> (2)..(2)
<223> n is a, c, g, or t

<220>
<221> misc_feature
10   <222> (17)..(17)
<223> n is a, c, g, or t

<220>
<221> misc_feature
15   <222> (37)..(37)
<223> n is a, c, g, or t

<220>
<221> misc_feature
20   <222> (52)..(53)
<223> n is a, c, g, or t

<220>
<221> misc_feature
25   <222> (56)..(56)
<223> n is a, c, g, or t

<220>
<221> misc_feature
30   <222> (77)..(77)
<223> n is a, c, g, or t

<220>
<221> misc_feature
35   <222> (85)..(85)
<223> n is a, c, g, or t

<220>
<221> misc_feature
40   <222> (89)..(89)
<223> n is a, c, g, or t

<220>
<221> misc_feature
45   <222> (96)..(96)
<223> n is a, c, g, or t

<400> 22

cntgcgccat ttactgnagg tggacaagga tactatnaac aaagatgtgg cnnaangaga   60

ataatggaag atagctntga ggatnaacnc tggttnaggg   100

<210> 23
<211> 100
<212> DNA
<213> Human

<220>
<221> misc_feature
<222> (17)..(17)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (19)..(19)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (27)..(29)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (37)..(38)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (46)..(46)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (49)..(49)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (65)..(65)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (72)..(72)
<223> n is a, c, g, or t

5

<400> 23
acaccttccc acttgcngna aaggggnnng gcccccnnct tgggcnganc attaagcctt   60

tttgnggctg cngcccctgt gcctggtgcc acaacaaatg   100

10

<210> 24
<211> 227
<212> DNA
15 <213> Human

<220>
<221> misc_feature
20 <222> (5)..(5)
<223> n is a, c, g, or t

<220>
<221> misc_feature
25 <222> (13)..(13)
<223> n is a, c, g, or t

<220>
<221> misc_feature
30 <222> (71)..(71)
<223> n is a, c, g, or t

<220>
<221> misc_feature
35 <222> (88)..(88)
<223> n is a, c, g, or t

<220>
<221> misc_feature
40 <222> (91)..(91)
<223> n is a, c, g, or t

<220>
<221> misc_feature
45 <222> (109)..(109)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (157)..(157)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (177)..(177)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (199)..(199)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (207)..(207)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (211)..(211)
<223> n is a, c, g, or t

<400> 24
ccggncacca ccnttaaggt tgggggattt ccccaaaaaa ggaaaatttt cggcggccaa   60

cgggaaggcc nttggggaaa aaaccaangg ncaaaccccc ccaaccacnc ggcccccccc   120

aaggggggtg gggaagagcc aaatttcttt gggaaanaac gcccccttgg ggaaaanaag   180

gccaaccacc tttcaacanc ccccaangcg nggaagccat ttcttgg   227

<210> 25
<211> 306
<212> DNA
<213> Human

<400> 25
tccaaaagta gagcagaggg atattttgtt ctactgagcc acgaaaaaca cctgaattgt   60

ttcgaccatg tgccttccca ggttgatgaa gacattgcta cacagtctgc agatcaggaa   120

ggaagaattg tatgtgggag tttttaatgg tctcatttca ttggctataa ctcagttaca   180

aggagaaata taactgcaga ggagctttga aaatttagtt cagctgaggg taaaggaaga   240

agagacaaat tttgtcatca gctagtgatc tgccatacaa ggtgttccct taatatgtgt   300

5   agaatg   306

      <210> 26
      <211> 492
10   <212> DNA
      <213> Human

      <220>
15   <221> misc_feature
      <222> (299)..(299)
      <223> n is a, c, g, or t

      <220>
20   <221> misc_feature
      <222> (333)..(333)
      <223> n is a, c, g, or t

      <220>
25   <221> misc_feature
      <222> (353)..(353)
      <223> n is a, c, g, or t

      <220>
30   <221> misc_feature
      <222> (410)..(411)
      <223> n is a, c, g, or t

      <220>
35   <221> misc_feature
      <222> (460)..(460)
      <223> n is a, c, g, or t

      <220>
40   <221> misc_feature
      <222> (474)..(474)
      <223> n is a, c, g, or t

      <220>
45   <221> misc_feature
      <222> (479)..(479)
      <223> n is a, c, g, or t

<400> 26

cggcttcggg ccaagcgttt ccagagtttg ccgaactgct gagcaagttc gctattctcc   60

agatcgccta gccctttgcg ggcgaccacc acgatgtccc agcctgtcag gttgtcctga   120

ttgaggcgaa aggactcgcg gatttgacgc ttgatgcggt tgcgctcgac ggcgagcttg   180

acgctctttt tgccgatcac caaacctagg cggggatgat caagctggtt atcgcgcgct   240

agcagcagga cacttttgcc cgggagcttt accgcttggg gagtcgaaga ctgccttgna   300

ttgccgggga gtcagcagtc gctttttccc ggncgaagcc tcgaactcac cancctgtct   360

ggattaatta gacagcaaga cgcttgcggc ccctttggcg cgaacgaacn ncgaaaagga   420

cttgcgcggc ccgtttcttt gggggggccaa taccgggggcn cggggaaaac ccgnggggng   480

gccaaacccc cc   492

<210> 27
<211> 500
<212> DNA
<213> Human

<220>
<221> misc_feature
<222> (348)..(348)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (422)..(422)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (435)..(435)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (476)..(476)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (490)..(490)
<223> n is a, c, g, or t

<400> 27
cgaagcgatg gaagcgcaag cttggtaggg gagcattccc acggcagaga aggtcgggcg   60

acgagccggg ctggagcggt gggaaaagca aatgtaggca taagtaacga caatgcgggc   120

gagaaccccg cacaccgaaa ggctaaggat tcctccgcta tgtcaatcaa cggagggtta   180

gtcgggtact aaggcgttag cgaaggcgaa gcgccgatgt gaaggggggtt aatattcctc   240

cacttgccat gcgtgtgaat ccatgacgga gacgaagccg ggggtgcgtc ctgacggaag   300

tgggcgccag caggggcggc cttcgggcca aaccgaacct caggtcanac ttccaagaaa   360

agtgggtgaa acgccagcgc atggcaaccc gtaccgcaaa ccgacacagg tagccggggg   420

anaacatcct aaggngctcg agagtacttt ctagagcggc cgcggggcccc atcganttt   480

ccacccgggn ggggtaccag   500

<210> 28
<211> 231
<212> DNA
<213> Human

<220>
<221> misc_feature
<222> (18)..(18)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (47)..(47)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (59)..(59)
<223> n is a, c, g, or t

<220>

<221> misc_feature
<222> (74)..(74)
<223> n is a, c, g, or t

5 <220>
<221> misc_feature
<222> (138)..(138)
<223> n is a, c, g, or t

10 <220>
<221> misc_feature
<222> (174)..(174)
<223> n is a, c, g, or t

15 <220>
<221> misc_feature
<222> (176)..(176)
<223> n is a, c, g, or t

20 <220>
<221> misc_feature
<222> (211)..(211)
<223> n is a, c, g, or t

25 <400> 28
aagaaattcc gggcacgnag gcacgcccct ggtaattccc caggcgnact tctggggang   60

gctggaaggc ttgnagggca gaaaagggat ccgcctttgg gaggaaccca ggtaaggttt   120

30 aagaaggaac ccaccctngg ggccaaacaa aaacttaaaa acccccccat ttcntncccc   180

ccaaaaaaaa aattttaaa aaaaattttt ngcccccggg ggcattgggg g   231

35 <210> 29
<211> 109
<212> DNA
<213> Human

40

<220>
<221> misc_feature
<222> (1)..(2)
<223> n is a, c, g, or t

45

<220>
<221> misc_feature

<222> (12)..(12)
<223> n is a, c, g, or t

<220>
5   <221> misc_feature
<222> (29)..(29)
<223> n is a, c, g, or t

<220>
10   <221> misc_feature
<222> (34)..(34)
<223> n is a, c, g, or t

<400> 29
15   nncgaacaat angtctggag ctcgtgcgnc ctgnaggtgc gacactagtg gatccaaaga   60

attcggcacg agggattaca gtcgtgagcc actgcacctg gctgcaatt   109

20   <210> 30
<211> 100
<212> DNA
<213> Human

25

<220>
<221> misc_feature
<222> (3)..(6)
<223> n is a, c, g, or t

30
<220>
<221> misc_feature
<222> (8)..(8)
<223> n is a, c, g, or t

35
<220>
<221> misc_feature
<222> (13)..(13)
<223> n is a, c, g, or t

40
<220>
<221> misc_feature
<222> (15)..(15)
<223> n is a, c, g, or t

45
<220>
<221> misc_feature

```
        <222> (20)..(20)
        <223> n is a, c, g, or t


        <220>
 5      <221> misc_feature
        <222> (27)..(27)
        <223> n is a, c, g, or t


        <220>
10      <221> misc_feature
        <222> (32)..(33)
        <223> n is a, c, g, or t


        <220>
15      <221> misc_feature
        <222> (40)..(40)
        <223> n is a, c, g, or t


        <220>
20      <221> misc_feature
        <222> (49)..(50)
        <223> n is a, c, g, or t


        <220>
25      <221> misc_feature
        <222> (57)..(57)
        <223> n is a, c, g, or t


        <220>
30      <221> misc_feature
        <222> (63)..(63)
        <223> n is a, c, g, or t


        <220>
35      <221> misc_feature
        <222> (67)..(67)
        <223> n is a, c, g, or t


        <220>
40      <221> misc_feature
        <222> (69)..(69)
        <223> n is a, c, g, or t


        <220>
45      <221> misc_feature
        <222> (76)..(76)
        <223> n is a, c, g, or t
```

<220>
<221> misc_feature
<222> (78)..(78)
5   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (87)..(87)
10 <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (89)..(89)
15 <223> n is a, c, g, or t

<400> 30
tcnnnntntg gtntnggctn tccgagnggc anngagtgan tgcccgttnn tattgancac   60

20 cantcantng ttgccntntg atacccnana caaaattgaa   100

<210> 31
<211> 100
25 <212> DNA
<213> Human

<220>
30 <221> misc_feature
<222> (12)..(12)
<223> n is a, c, g, or t

<220>
35 <221> misc_feature
<222> (26)..(26)
<223> n is a, c, g, or t

<220>
40 <221> misc_feature
<222> (46)..(46)
<223> n is a, c, g, or t

<220>
45 <221> misc_feature
<222> (49)..(49)
<223> n is a, c, g, or t

3217

<220>
<221> misc_feature
<222> (55)..(55)
5   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (60)..(60)
10   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (63)..(63)
15   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (69)..(70)
20   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (73)..(73)
25   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (79)..(79)
30   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (92)..(92)
35   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (96)..(96)
40   <223> n is a, c, g, or t

<400> 31
tcgggcggggg ancccttttac ctgtcnttac gatgcgcaag tagatnccng atttngtccn   60

45   ganggtcgnn aanttaggnt tccagcctgc gncacngcca   100

3218

<210> 32
<211> 104
<212> DNA
<213> Human

5

<220>
<221> misc_feature
<222> (2)..(2)
10   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (7)..(7)
15   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (27)..(27)
20   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (34)..(34)
25   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (57)..(57)
30   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (63)..(64)
35   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (67)..(67)
40   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (73)..(73)
45   <223> n is a, c, g, or t

<220>

<221> misc_feature
<222> (75)..(78)
<223> n is a, c, g, or t

5   <220>
<221> misc_feature
<222> (80)..(80)
<223> n is a, c, g, or t

10 <220>
<221> misc_feature
<222> (90)..(90)
<223> n is a, c, g, or t

15 <220>
<221> misc_feature
<222> (96)..(98)
<223> n is a, c, g, or t

20 <400> 32
cntgctntta cgatgcgcaa ggtagtnccg tgantttagt ccgtgatgtg tcgaaanatt   60

agnnttncag ccngnnnnan tgccattttn gctctnnnga gaaa   104

25
<210> 33
<211> 102
<212> DNA
<213> Human

30

<220>
<221> misc_feature
<222> (5)..(5)
35 <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (12)..(12)
40 <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (28)..(28)
45 <223> n is a, c, g, or t

<220>

<220>
<221> misc_feature
<222> (32)..(32)
<223> n is a, c, g, or t

5   <220>
<221> misc_feature
<222> (38)..(38)
<223> n is a, c, g, or t

10   <220>
<221> misc_feature
<222> (44)..(44)
<223> n is a, c, g, or t

15   <220>
<221> misc_feature
<222> (57)..(57)
<223> n is a, c, g, or t

20   <220>
<221> misc_feature
<222> (68)..(68)
<223> n is a, c, g, or t

25   <220>
<221> misc_feature
<222> (76)..(76)
<223> n is a, c, g, or t

30   <220>
<221> misc_feature
<222> (82)..(82)
<223> n is a, c, g, or t

35   <220>
<221> misc_feature
<222> (92)..(92)
<223> n is a, c, g, or t

40   <400> 33

tgggntggcc cngcttaact tttgcccncg anctcggngt tcgnacaggg gcgaagnaaa   60

ccgccaantt ttttcnaacc cnacttgttt tnggttttag tt   102

45

<210> 34
<211> 100

<212> DNA
<213> Human

5   <220>
    <221> misc_feature
    <222> (3)..(3)
    <223> n is a, c, g, or t

10 <220>
    <221> misc_feature
    <222> (21)..(21)
    <223> n is a, c, g, or t

15 <220>
    <221> misc_feature
    <222> (27)..(28)
    <223> n is a, c, g, or t

20 <220>
    <221> misc_feature
    <222> (38)..(38)
    <223> n is a, c, g, or t

25 <220>
    <221> misc_feature
    <222> (47)..(47)
    <223> n is a, c, g, or t

30 <220>
    <221> misc_feature
    <222> (50)..(50)
    <223> n is a, c, g, or t

35 <220>
    <221> misc_feature
    <222> (53)..(53)
    <223> n is a, c, g, or t

40 <220>
    <221> misc_feature
    <222> (61)..(61)
    <223> n is a, c, g, or t

45 <220>
    <221> misc_feature
    <222> (73)..(73)

<220>
<221> misc_feature
<222> (78)..(78)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (83)..(83)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (85)..(85)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (97)..(97)
<223> n is a, c, g, or t

<400> 34
agnacgcctt tacagcttta ngatgcnnga gagagtancg gatttgnccn tgntggtgga   60

naaattaggg ttncagcntg tgnantgcca ttttcgntaa   100

<210> 35
<211> 100
<212> DNA
<213> Human

<220>
<221> misc_feature
<222> (21)..(22)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (28)..(28)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (32)..(32)

<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (65)..(65)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (67)..(68)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (70)..(70)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (77)..(77)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (83)..(83)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (92)..(92)
<223> n is a, c, g, or t

<400> 35
cacgatagca tcagacggcg nncttggngc cntttttgccc gctggtcaca ggacaacgca   60

tttcncnntn tggtgtncgg ctntcacgca tnggcgcgag   100

<210> 36
<211> 153
<212> DNA
<213> Human

<220>
<221> misc_feature
<222> (4)..(4)

3224

<223> n is a, c, g, or t

<220>
<221> misc_feature
5 <222> (8)..(8)
<223> n is a, c, g, or t

<220>
<221> misc_feature
10 <222> (29)..(29)
<223> n is a, c, g, or t

<220>
<221> misc_feature
15 <222> (43)..(44)
<223> n is a, c, g, or t

<220>
<221> misc_feature
20 <222> (46)..(46)
<223> n is a, c, g, or t

<220>
<221> misc_feature
25 <222> (57)..(57)
<223> n is a, c, g, or t

<220>
<221> misc_feature
30 <222> (59)..(59)
<223> n is a, c, g, or t

<220>
<221> misc_feature
35 <222> (84)..(84)
<223> n is a, c, g, or t

<220>
<221> misc_feature
40 <222> (98)..(98)
<223> n is a, c, g, or t

<220>
<221> misc_feature
45 <222> (115)..(115)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (117)..(118)
<223> n is a, c, g, or t

<400> 36
tggngccntt ttgcccgctg gtcacaggna aacgcatttc acnntntggt gttcggntnt   60

cacgcacggc agcgagtgca atgnccgatt cattcttnaa cgacgcacac acccngnngc   120

cctgtgaaac ccataaacag tgggaaatgg tgc   153

<210> 37
<211> 151
<212> DNA
<213> Human

<220>
<221> misc_feature
<222> (7)..(7)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (10)..(10)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (53)..(53)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (61)..(61)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (65)..(66)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (72)..(72)

<223> n is a, c, g, or t

<220>
<221> misc_feature
5   <222> (74)..(75)
<223> n is a, c, g, or t

<220>
<221> misc_feature
10 <222> (89)..(89)
<223> n is a, c, g, or t

<220>
<221> misc_feature
15 <222> (94)..(94)
<223> n is a, c, g, or t

<220>
<221> misc_feature
20 <222> (100)..(100)
<223> n is a, c, g, or t

<220>
<221> misc_feature
25 <222> (107)..(107)
<223> n is a, c, g, or t

<220>
<221> misc_feature
30 <222> (126)..(126)
<223> n is a, c, g, or t

<220>
<221> misc_feature
35 <222> (141)..(141)
<223> n is a, c, g, or t

<400> 37
gcgcgcntgn aggccccgac actagtggat ccaaagtatt ttggcacgag ctnagttcga   60
40

ngatnnagac cncnnatcac ctaatacanc catnactcan atgactnttt gtgcgccttt   120

tatcanatgc atagcctatc naaaacatca c   151

45

<210> 38
<211> 100

<212> DNA
<213> Human

5   <220>
<221> misc_feature
<222> (2)..(2)
<223> n is a, c, g, or t

10   <220>
<221> misc_feature
<222> (10)..(10)
<223> n is a, c, g, or t

15   <220>
<221> misc_feature
<222> (61)..(61)
<223> n is a, c, g, or t

20   <220>
<221> misc_feature
<222> (63)..(63)
<223> n is a, c, g, or t

25   <220>
<221> misc_feature
<222> (72)..(72)
<223> n is a, c, g, or t

30   <220>
<221> misc_feature
<222> (79)..(79)
<223> n is a, c, g, or t

35   <400> 38
gngcgcttgn aggccgacac taggggatcc aaagaattcg gcacgagctc gtgccgaatt   60

ngncacgagt tnggctgcnt ctttatacaa cttttcttca   100

40
<210> 39
<211> 100
<212> DNA
<213> Human

45

<220>

3228

<221> misc_feature
<222> (5)..(5)
<223> n is a, c, g, or t

5   <220>
<221> misc_feature
<222> (7)..(8)
<223> n is a, c, g, or t

10 <220>
<221> misc_feature
<222> (10)..(10)
<223> n is a, c, g, or t

15 <220>
<221> misc_feature
<222> (15)..(16)
<223> n is a, c, g, or t

20 <220>
<221> misc_feature
<222> (20)..(20)
<223> n is a, c, g, or t

25 <220>
<221> misc_feature
<222> (24)..(24)
<223> n is a, c, g, or t

30 <220>
<221> misc_feature
<222> (71)..(71)
<223> n is a, c, g, or t

35 <400> 39
aaagngnntn ctggnnttan gcanttaacc caggcactgg ggcgctgaac agctactcag   60

ctgcttaagt ngtcccactg gtccagacca gcgacccagc   100

40
<210> 40
<211> 102
<212> DNA
<213> Human
45

<220>

3229

<221> misc_feature
<222> (80)..(80)
<223> n is a, c, g, or t

5   <220>
<221> misc_feature
<222> (91)..(91)
<223> n is a, c, g, or t

10   <400> 40
ttcccccagg atctttctta tatctatcag atctaggtga aaggattact gtcttgtagg   60

tgtcctgaag gacaagccgn ttcgtttgaa nctgtgaaat ac   102

15

<210> 41
<211> 325
<212> DNA
<213> Human

20
<400> 41
ttcggcacga ggagaagaga ggagccgtca gaacatatgg gggatgtgtt caagaagcag   60

atttgtggtc ggaagctttg caaagagggg acctgggtct gagtgacatg cgtggccact   120

25
ggtgctcctg cgtttggact gtgcaggcct ctcctatgct gatgcgtctc cccactcctg   180

agctaatttc tgctctgctc cttctgtgac atgtggcagc gtgggaaata gccactgtcc   240

30   cctgtccctg ctgttcctgg tgtcacccag caccaggcca ctctgggagc cagggcagat   300

ggtcctccct gtggtcctgg cctct   325

35   <210> 42
<211> 103
<212> DNA
<213> Human

40
<220>
<221> misc_feature
<222> (14)..(14)
<223> n is a, c, g, or t
45
<220>
<221> misc_feature

<222> (31)..(31)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (36)..(36)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (63)..(63)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (73)..(73)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (93)..(93)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (98)..(98)
<223> n is a, c, g, or t

<400> 42
gtggcccaag gggnactgaa ggggccctcc ntaagnggag gggttgggga gtaaggcctg   60

ggnaggaccc tgntgactcg ggggcgggga gcngggancc agg   103

<210> 43
<211> 221
<212> DNA
<213> Human

<400> 43
catattttga aatacttttc tcccaaactg ggtttattag cgtgtaccct gcttttccac   60

tttaaaaatt tatgccatat gtccagcttc cagtcagtgc ttctggttag catgaggata   120

actagatttt actgtagatg gtagataaaa gtccagtgaa aagcaaagat gtgtaatgtt   180

ttggtagcct cagtgctctt atcccaagta aaagcaaagt t   221

<210> 44
<211> 100
5   <212> DNA
<213> Human

<220>
10   <221> misc_feature
<222> (2)..(2)
<223> n is a, c, g, or t

<220>
15   <221> misc_feature
<222> (11)..(11)
<223> n is a, c, g, or t

<220>
20   <221> misc_feature
<222> (27)..(28)
<223> n is a, c, g, or t

<220>
25   <221> misc_feature
<222> (34)..(34)
<223> n is a, c, g, or t

<220>
30   <221> misc_feature
<222> (38)..(39)
<223> n is a, c, g, or t

<220>
35   <221> misc_feature
<222> (41)..(41)
<223> n is a, c, g, or t

<220>
40   <221> misc_feature
<222> (49)..(50)
<223> n is a, c, g, or t

<220>
45   <221> misc_feature
<222> (61)..(62)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (67)..(68)
5   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (76)..(76)
10   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (79)..(80)
15   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (85)..(85)
20   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (89)..(89)
25   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (93)..(93)
30   <223> n is a, c, g, or t

<400> 44
anagagatca ntgatttatt gctgggnncc tgtntganng ntctaaggnn tgaagattat   60

35   nncattnngc aagcgnacnn gcgcngccna gcngaccagg   100

<210> 45
<211> 106
40   <212> DNA
<213> Human

<220>
45   <221> misc_feature
<222> (8)..(8)
<223> n is a, c, g, or t

3233

<220>
<221> misc_feature
<222> (24)..(24)
5   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (33)..(34)
10   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (47)..(48)
15   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (58)..(58)
20   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (63)..(63)
25   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (68)..(68)
30   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (71)..(71)
35   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (73)..(73)
40   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (77)..(77)
45   <223> n is a, c, g, or t

<220>

<221> misc_feature
<222> (88)..(88)
<223> n is a, c, g, or t

5   <220>
<221> misc_feature
<222> (95)..(96)
<223> n is a, c, g, or t

10   <400> 45
atatttcngg agcttgcagc ggcnacacta ggnnactaaa agaattnnag aaagaggnct   60

atnggacnag nanacangaa acctgcanac ttggnngctt ggaagt   106

15
<210> 46
<211> 100
<212> DNA
<213> Human
20

<220>
<221> misc_feature
<222> (74)..(74)
25   <223> n is a, c, g, or t

<400> 46
gatgtggaga tgcttgatag gttactgggc ggcaatccag gagttgatga agcgcatatg   60

30   cgaacatttc acgngcatat tgcggtgcaa gggcttactg   100

<210> 47
<211> 101
35   <212> DNA
<213> Human

<220>
40   <221> misc_feature
<222> (7)..(8)
<223> n is a, c, g, or t

<220>
45   <221> misc_feature
<222> (17)..(17)
<223> n is a, c, g, or t

3235

<220>
<221> misc_feature
<222> (23)..(23)
5   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (33)..(33)
10   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (42)..(42)
15   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (47)..(48)
20   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (52)..(52)
25   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (55)..(55)
30   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (60)..(60)
35   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (62)..(62)
40   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (66)..(66)
45   <223> n is a, c, g, or t

<220>

<221> misc_feature
<222> (70)..(71)
<223> n is a, c, g, or t

5 <220>
<221> misc_feature
<222> (74)..(74)
<223> n is a, c, g, or t

10 <220>
<221> misc_feature
<222> (84)..(84)
<223> n is a, c, g, or t

15 <220>
<221> misc_feature
<222> (86)..(87)
<223> n is a, c, g, or t

20 <220>
<221> misc_feature
<222> (96)..(96)
<223> n is a, c, g, or t

25 <220>
<221> misc_feature
<222> (99)..(100)
<223> n is a, c, g, or t

30 <400> 47
cccccccnncc cttcttntcc ccnaaagaat aanataagaa tngctannga gnaancgacn   60

anggtnttan nagntatatg tatntnncaa accaantann a   101

35

<210> 48
<211> 100
<212> DNA
<213> Human
40

<220>
<221> misc_feature
<222> (5)..(6)
45 <223> n is a, c, g, or t

<220>

<221> misc_feature
<222> (33)..(33)
<223> n is a, c, g, or t

5 <220>
<221> misc_feature
<222> (35)..(36)
<223> n is a, c, g, or t

10 <220>
<221> misc_feature
<222> (42)..(42)
<223> n is a, c, g, or t

15 <220>
<221> misc_feature
<222> (46)..(46)
<223> n is a, c, g, or t

20 <220>
<221> misc_feature
<222> (48)..(48)
<223> n is a, c, g, or t

25 <220>
<221> misc_feature
<222> (55)..(55)
<223> n is a, c, g, or t

30 <220>
<221> misc_feature
<222> (59)..(59)
<223> n is a, c, g, or t

35 <220>
<221> misc_feature
<222> (69)..(69)
<223> n is a, c, g, or t

40 <220>
<221> misc_feature
<222> (81)..(81)
<223> n is a, c, g, or t

45 <220>
<221> misc_feature
<222> (87)..(87)

<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (91)..(91)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (94)..(94)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (97)..(97)
<223> n is a, c, g, or t

<400> 48
aaggnnaggc tcgttggggg aaaaaacccg ccntnncggg cncccngnaa acccncacna   60

gggggacccna aaaaccggaa naaaccnccc nagnaancca   100

<210> 49
<211> 473
<212> DNA
<213> Human

<220>
<221> misc_feature
<222> (20)..(20)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (38)..(38)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (164)..(164)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (178)..(178)

<223> n is a, c, g, or t

<220>
<221> misc_feature
5   <222> (201)..(201)
<223> n is a, c, g, or t

<220>
<221> misc_feature
10 <222> (211)..(211)
<223> n is a, c, g, or t

<220>
<221> misc_feature
15 <222> (274)..(274)
<223> n is a, c, g, or t

<220>
<221> misc_feature
20 <222> (305)..(305)
<223> n is a, c, g, or t

<220>
<221> misc_feature
25 <222> (340)..(340)
<223> n is a, c, g, or t

<220>
<221> misc_feature
30 <222> (346)..(346)
<223> n is a, c, g, or t

<220>
<221> misc_feature
35 <222> (386)..(387)
<223> n is a, c, g, or t

<220>
<221> misc_feature
40 <222> (405)..(405)
<223> n is a, c, g, or t

<220>
<221> misc_feature
45 <222> (433)..(433)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (446)..(446)
<223> n is a, c, g, or t

5

<400> 49

atgagtatga aatgaaaggn tgagatgaaa tgatgatntg agatgagatg aaatgagatg   60

aaaccgagat gaaatgatga aatgatgaga tgagaccgag acgaaatgat gagatgaaat   120

gagatgagat aaaatgagat gaaatgaagt gaaatgaaat gaantcctga aattgacntg   180

agatgaactg agataaaatg ntgagatgaa ntgatgagaa gaaatgagat gaaatgagat   240

gagatgatga gatgaaaaat gctgagatga aacntgatga gatgaaatga tgagatgaat   300

tgaantgaaa tgaaataatg aaataatgac ctgagatgan atgaantgat gaactgatga   360

actaatgaaa tgaaaatgaa atgganntga tgagatgaga agaantgctg agatgagata   420

aaatgagatg aantgatgag atgaantgaa atgctgagat gagatgagat gaa   473

<210> 50
<211> 453
<212> DNA
<213> Human

<220>
<221> misc_feature
<222> (5)..(6)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (13)..(13)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (18)..(18)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (22)..(22)

<223> n is a, c, g, or t

<220>
<221> misc_feature
5   <222> (39)..(39)
<223> n is a, c, g, or t

<220>
<221> misc_feature
10   <222> (45)..(45)
<223> n is a, c, g, or t

<220>
<221> misc_feature
15   <222> (48)..(48)
<223> n is a, c, g, or t

<220>
<221> misc_feature
20   <222> (54)..(54)
<223> n is a, c, g, or t

<220>
<221> misc_feature
25   <222> (65)..(65)
<223> n is a, c, g, or t

<220>
<221> misc_feature
30   <222> (70)..(70)
<223> n is a, c, g, or t

<220>
<221> misc_feature
35   <222> (72)..(72)
<223> n is a, c, g, or t

<220>
<221> misc_feature
40   <222> (80)..(80)
<223> n is a, c, g, or t

<220>
<221> misc_feature
45   <222> (83)..(83)
<223> n is a, c, g, or t

```
<220>
<221> misc_feature
<222> (90)..(90)
<223> n is a, c, g, or t
```

5

```
<220>
<221> misc_feature
<222> (94)..(94)
<223> n is a, c, g, or t
```

10

```
<220>
<221> misc_feature
<222> (96)..(96)
<223> n is a, c, g, or t
```

15

```
<220>
<221> misc_feature
<222> (98)..(98)
<223> n is a, c, g, or t
```

20

```
<220>
<221> misc_feature
<222> (102)..(102)
<223> n is a, c, g, or t
```

25

```
<220>
<221> misc_feature
<222> (104)..(104)
<223> n is a, c, g, or t
```

30

```
<220>
<221> misc_feature
<222> (113)..(113)
<223> n is a, c, g, or t
```

35

```
<220>
<221> misc_feature
<222> (115)..(115)
<223> n is a, c, g, or t
```

40

```
<220>
<221> misc_feature
<222> (117)..(117)
<223> n is a, c, g, or t
```

45

```
<220>
<221> misc_feature
```

```
<222> (121)..(121)
<223> n is a, c, g, or t


      <220>
5     <221> misc_feature
      <222> (123)..(123)
      <223> n is a, c, g, or t


      <220>
10    <221> misc_feature
      <222> (125)..(125)
      <223> n is a, c, g, or t


      <220>
15    <221> misc_feature
      <222> (128)..(128)
      <223> n is a, c, g, or t


      <220>
20    <221> misc_feature
      <222> (142)..(142)
      <223> n is a, c, g, or t


      <220>
25    <221> misc_feature
      <222> (144)..(144)
      <223> n is a, c, g, or t


      <220>
30    <221> misc_feature
      <222> (160)..(160)
      <223> n is a, c, g, or t


      <220>
35    <221> misc_feature
      <222> (174)..(175)
      <223> n is a, c, g, or t


      <220>
40    <221> misc_feature
      <222> (180)..(181)
      <223> n is a, c, g, or t


      <220>
45    <221> misc_feature
      <222> (186)..(186)
      <223> n is a, c, g, or t
```

<220>
<221> misc_feature
<222> (192)..(192)
5   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (198)..(198)
10   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (205)..(205)
15   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (215)..(215)
20   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (223)..(224)
25   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (233)..(234)
30   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (238)..(238)
35   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (243)..(243)
40   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (253)..(253)
45   <223> n is a, c, g, or t

<220>

```
      <221> misc_feature
      <222> (257)..(257)
      <223> n is a, c, g, or t

  5   <220>
      <221> misc_feature
      <222> (268)..(268)
      <223> n is a, c, g, or t

 10   <220>
      <221> misc_feature
      <222> (280)..(280)
      <223> n is a, c, g, or t

 15   <220>
      <221> misc_feature
      <222> (291)..(291)
      <223> n is a, c, g, or t

 20   <220>
      <221> misc_feature
      <222> (296)..(296)
      <223> n is a, c, g, or t

 25   <220>
      <221> misc_feature
      <222> (300)..(300)
      <223> n is a, c, g, or t

 30   <220>
      <221> misc_feature
      <222> (305)..(305)
      <223> n is a, c, g, or t

 35   <220>
      <221> misc_feature
      <222> (308)..(308)
      <223> n is a, c, g, or t

 40   <220>
      <221> misc_feature
      <222> (311)..(311)
      <223> n is a, c, g, or t

 45   <220>
      <221> misc_feature
      <222> (319)..(319)
```

3246

<223> n is a, c, g, or t

<220>
<221> misc_feature
5   <222> (322)..(322)
<223> n is a, c, g, or t

<220>
<221> misc_feature
10 <222> (326)..(326)
<223> n is a, c, g, or t

<220>
<221> misc_feature
15 <222> (328)..(328)
<223> n is a, c, g, or t

<220>
<221> misc_feature
20 <222> (334)..(335)
<223> n is a, c, g, or t

<220>
<221> misc_feature
25 <222> (338)..(339)
<223> n is a, c, g, or t

<220>
<221> misc_feature
30 <222> (347)..(347)
<223> n is a, c, g, or t

<220>
<221> misc_feature
35 <222> (352)..(352)
<223> n is a, c, g, or t

<220>
<221> misc_feature
40 <222> (358)..(358)
<223> n is a, c, g, or t

<220>
<221> misc_feature
45 <222> (361)..(361)
<223> n is a, c, g, or t

```
<220>
<221> misc_feature
<222> (367)..(367)
<223> n is a, c, g, or t

5

<220>
<221> misc_feature
<222> (382)..(382)
<223> n is a, c, g, or t

10

<220>
<221> misc_feature
<222> (389)..(389)
<223> n is a, c, g, or t

15

<220>
<221> misc_feature
<222> (395)..(395)
<223> n is a, c, g, or t

20

<220>
<221> misc_feature
<222> (410)..(410)
<223> n is a, c, g, or t

25

<220>
<221> misc_feature
<222> (413)..(414)
<223> n is a, c, g, or t

30

<220>
<221> misc_feature
<222> (418)..(418)
<223> n is a, c, g, or t

35

<220>
<221> misc_feature
<222> (425)..(425)
<223> n is a, c, g, or t

40

<220>
<221> misc_feature
<222> (436)..(436)
<223> n is a, c, g, or t

45

<220>
<221> misc_feature
```

<222> (443)..(443)
<223> n is a, c, g, or t

<400> 50
ttccnnagct gtnacganac antcttgaat tgaaattgna cacanctngt gtgnagccct   60

gatanggccn gnaagcaatn tanaggatan ccgnangnta tngnaacaca ttncncnagc   120

ntntncanca gctgatgcag gncncctatg atgcgattan ggactacgac tatnnctcan   180

ngtctnaaca gncgcgangg ctgantacta aaagnacaca aanntgtgca ccnncatnac   240

tcncgttgac tgnacantgt agacctgnaa tacctggctn aaaggggtct nactgncatn   300

agagntgnag ntgcccctnc antagngnga gctnnaanng gcctgtnttt gntttacntc   360

ntcgganagg cgatgccatt anagacccna gaacncattg gtgatatacn ctnnaccngg   420

agggnttaca ttgggnaatg atnattatgg ggg   453

<210> 51
<211> 542
<212> DNA
<213> Human

<220>
<221> misc_feature
<222> (19)..(19)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (59)..(59)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (87)..(87)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (119)..(119)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (203)..(203)
<223> n is a, c, g, or t

5

<220>
<221> misc_feature
<222> (215)..(215)
<223> n is a, c, g, or t

10

<220>
<221> misc_feature
<222> (274)..(274)
<223> n is a, c, g, or t

15

<220>
<221> misc_feature
<222> (296)..(296)
<223> n is a, c, g, or t

20

<220>
<221> misc_feature
<222> (309)..(309)
<223> n is a, c, g, or t

25

<220>
<221> misc_feature
<222> (353)..(353)
<223> n is a, c, g, or t

30

<220>
<221> misc_feature
<222> (425)..(427)
<223> n is a, c, g, or t

35

<220>
<221> misc_feature
<222> (431)..(431)
<223> n is a, c, g, or t

40

<220>
<221> misc_feature
<222> (451)..(451)
<223> n is a, c, g, or t

45

<220>
<221> misc_feature

<222> (470)..(470)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (472)..(472)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (478)..(478)
<223> n is a, c, g, or t

<400> 51
caactgtgag caaggaatnc cattaaatgc cattgtatat tcattgatca gtgaaatcnc   60

atctgggtca cagtggcatc tatgttnaca gtataaatcc ctgtggctat gaatgaaang   120

cttgtttaga cttgcatctg cacatagaag tagggatttc atgctgttat cagcctaatt   180

ttagcctata gaatttcaag ttngctagag gtttngctct ccatggtata agtttagcaa   240

gaaaagtcat ttgtctgctg ctctagcagg ttanaatgtg gaagtatagt gtgcanagtt   300

ttaatccgna tatgttatta aaacatatac atcattttat atcatacatc tgnaataaat   360

attcaaaatt aaatagtgat ttgggattga ttacatctta ttactagctg taataaatga   420

cctcnnngat ngtttaaaat tgttttcctc ncatataata aaaatacctn angcatanat   480

cgattgtcca aaaattgaat atatatacac acctcttcca ttagaactaa atatgtggaa   540

tg   542

<210> 52
<211> 733
<212> DNA
<213> Human

<220>
<221> misc_feature
<222> (13)..(14)
<223> n is a, c, g, or t

<220>

<221> misc_feature
<222> (17)..(17)
<223> n is a, c, g, or t

5   <220>
<221> misc_feature
<222> (20)..(20)
<223> n is a, c, g, or t

10 <220>
<221> misc_feature
<222> (22)..(22)
<223> n is a, c, g, or t

15 <220>
<221> misc_feature
<222> (27)..(27)
<223> n is a, c, g, or t

20 <220>
<221> misc_feature
<222> (29)..(29)
<223> n is a, c, g, or t

25 <220>
<221> misc_feature
<222> (31)..(31)
<223> n is a, c, g, or t

30 <220>
<221> misc_feature
<222> (36)..(36)
<223> n is a, c, g, or t

35 <220>
<221> misc_feature
<222> (43)..(43)
<223> n is a, c, g, or t

40 <220>
<221> misc_feature
<222> (46)..(46)
<223> n is a, c, g, or t

45 <220>
<221> misc_feature
<222> (58)..(59)

<223> n is a, c, g, or t

<220>
<221> misc_feature
5 <222> (74)..(74)
<223> n is a, c, g, or t

<220>
<221> misc_feature
10 <222> (78)..(78)
<223> n is a, c, g, or t

<220>
<221> misc_feature
15 <222> (81)..(81)
<223> n is a, c, g, or t

<220>
<221> misc_feature
20 <222> (85)..(85)
<223> n is a, c, g, or t

<220>
<221> misc_feature
25 <222> (87)..(88)
<223> n is a, c, g, or t

<220>
<221> misc_feature
30 <222> (90)..(92)
<223> n is a, c, g, or t

<220>
<221> misc_feature
35 <222> (95)..(96)
<223> n is a, c, g, or t

<220>
<221> misc_feature
40 <222> (105)..(105)
<223> n is a, c, g, or t

<220>
<221> misc_feature
45 <222> (107)..(107)
<223> n is a, c, g, or t

```
<220>
<221> misc_feature
<222> (109)..(109)
<223> n is a, c, g, or t
```

5

```
<220>
<221> misc_feature
<222> (115)..(117)
<223> n is a, c, g, or t
```

10

```
<220>
<221> misc_feature
<222> (120)..(120)
<223> n is a, c, g, or t
```

15

```
<220>
<221> misc_feature
<222> (123)..(123)
<223> n is a, c, g, or t
```

20

```
<220>
<221> misc_feature
<222> (148)..(148)
<223> n is a, c, g, or t
```

25

```
<220>
<221> misc_feature
<222> (154)..(156)
<223> n is a, c, g, or t
```

30

```
<220>
<221> misc_feature
<222> (167)..(167)
<223> n is a, c, g, or t
```

35

```
<220>
<221> misc_feature
<222> (169)..(172)
<223> n is a, c, g, or t
```

40

```
<220>
<221> misc_feature
<222> (179)..(179)
<223> n is a, c, g, or t
```

45

```
<220>
<221> misc_feature
```

<222> (183)..(183)
<223> n is a, c, g, or t

<220>
5   <221> misc_feature
<222> (185)..(187)
<223> n is a, c, g, or t

<220>
10 <221> misc_feature
<222> (194)..(194)
<223> n is a, c, g, or t

<220>
15 <221> misc_feature
<222> (200)..(203)
<223> n is a, c, g, or t

<220>
20 <221> misc_feature
<222> (205)..(205)
<223> n is a, c, g, or t

<220>
25 <221> misc_feature
<222> (235)..(236)
<223> n is a, c, g, or t

<220>
30 <221> misc_feature
<222> (242)..(242)
<223> n is a, c, g, or t

<220>
35 <221> misc_feature
<222> (244)..(244)
<223> n is a, c, g, or t

<220>
40 <221> misc_feature
<222> (246)..(247)
<223> n is a, c, g, or t

<220>
45 <221> misc_feature
<222> (250)..(250)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (303)..(303)
5   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (305)..(305)
10   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (318)..(318)
15   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (327)..(327)
20   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (331)..(331)
25   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (335)..(336)
30   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (347)..(347)
35   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (349)..(349)
40   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (353)..(353)
45   <223> n is a, c, g, or t

<220>

```
<221> misc_feature
<222> (362)..(362)
<223> n is a, c, g, or t

5    <220>
<221> misc_feature
<222> (365)..(365)
<223> n is a, c, g, or t

10   <220>
<221> misc_feature
<222> (388)..(388)
<223> n is a, c, g, or t

15   <220>
<221> misc_feature
<222> (395)..(395)
<223> n is a, c, g, or t

20   <220>
<221> misc_feature
<222> (405)..(405)
<223> n is a, c, g, or t

25   <220>
<221> misc_feature
<222> (407)..(407)
<223> n is a, c, g, or t

30   <220>
<221> misc_feature
<222> (412)..(412)
<223> n is a, c, g, or t

35   <220>
<221> misc_feature
<222> (416)..(416)
<223> n is a, c, g, or t

40   <220>
<221> misc_feature
<222> (429)..(429)
<223> n is a, c, g, or t

45   <220>
<221> misc_feature
<222> (435)..(435)
```

<223> n is a, c, g, or t

<220>
<221> misc_feature
5 <222> (444)..(444)
<223> n is a, c, g, or t

<220>
<221> misc_feature
10 <222> (475)..(475)
<223> n is a, c, g, or t

<220>
<221> misc_feature
15 <222> (481)..(481)
<223> n is a, c, g, or t

<220>
<221> misc_feature
20 <222> (485)..(485)
<223> n is a, c, g, or t

<220>
<221> misc_feature
25 <222> (488)..(488)
<223> n is a, c, g, or t

<220>
<221> misc_feature
30 <222> (505)..(507)
<223> n is a, c, g, or t

<220>
<221> misc_feature
35 <222> (525)..(525)
<223> n is a, c, g, or t

<220>
<221> misc_feature
40 <222> (528)..(528)
<223> n is a, c, g, or t

<220>
<221> misc_feature
45 <222> (532)..(532)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (534)..(535)
<223> n is a, c, g, or t

5

<220>
<221> misc_feature
<222> (543)..(543)
<223> n is a, c, g, or t

10

<220>
<221> misc_feature
<222> (551)..(553)
<223> n is a, c, g, or t

15

<220>
<221> misc_feature
<222> (555)..(555)
<223> n is a, c, g, or t

20

<220>
<221> misc_feature
<222> (561)..(561)
<223> n is a, c, g, or t

25

<220>
<221> misc_feature
<222> (568)..(568)
<223> n is a, c, g, or t

30

<220>
<221> misc_feature
<222> (573)..(573)
<223> n is a, c, g, or t

35

<220>
<221> misc_feature
<222> (584)..(584)
<223> n is a, c, g, or t

40

<220>
<221> misc_feature
<222> (589)..(589)
<223> n is a, c, g, or t

45

<220>
<221> misc_feature

<222> (598)..(598)
<223> n is a, c, g, or t

<220>
5 <221> misc_feature
<222> (605)..(605)
<223> n is a, c, g, or t

<220>
10 <221> misc_feature
<222> (612)..(612)
<223> n is a, c, g, or t

<220>
15 <221> misc_feature
<222> (618)..(618)
<223> n is a, c, g, or t

<220>
20 <221> misc_feature
<222> (633)..(633)
<223> n is a, c, g, or t

<220>
25 <221> misc_feature
<222> (647)..(647)
<223> n is a, c, g, or t

<220>
30 <221> misc_feature
<222> (653)..(654)
<223> n is a, c, g, or t

<220>
35 <221> misc_feature
<222> (664)..(664)
<223> n is a, c, g, or t

<220>
40 <221> misc_feature
<222> (679)..(679)
<223> n is a, c, g, or t

<220>
45 <221> misc_feature
<222> (689)..(689)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (695)..(695)
5   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (698)..(698)
10   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (711)..(711)
15   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (720)..(720)
20   <223> n is a, c, g, or t

<400> 52
atatgacctg cgnncanacn cnctaanang ngactngtta aanacnttcc gtggaatnna   60

25   ctcagactgc aaantgtnat nctgncnnan nntgnngact gtccngncng atttnnngcn   120

tgnaatacta ttgcctctta tatacacnac caannntgcg aagggcnann nnacctttnc   180

cantnnnctg gggncccacn nnngngaact gagagtggat cttgtgtacc tgacnnacca   240

.30 gntntnnagn agggcgctca ctctgattgg tgcaccatgg ttacacagtg tgtgcaaaga   300

ccngnctatc tcactganga tgattgncag ngccnntggg tggcacnang ggnactgatg   360

35   ancancactg accctgccga cgccagangc cgcanatccg gagantncat gngacnatat   420

aggttaccnc cttcnaccgg gcancaatct gcttctatgg tgaatgcaga ccatntagaa   480

ntctntcnct ataggcatga ttttnnncag tgcgtcagcc ttganaanga ancnnacttt   540

40   tgntagatga nnngntgctc ncccttgngg ctnacaaatt ccancaccnt tggtggcngc   600

agccnttaag ancacttntt ttgggttgcg ctnttggatg aattacnaat agnntgtttt   660

45   gttncaaggc ccttctgcna aatatgaana aaagngcnct tagctttttg ngggaactgn   720

actggaaatt ttg   733

```
<210> 53
<211> 100
<212> DNA
<213> Human


<220>
<221> misc_feature
<222> (13)..(13)
<223> n is a, c, g, or t


<220>
<221> misc_feature
<222> (15)..(15)
<223> n is a, c, g, or t


<220>
<221> misc_feature
<222> (37)..(37)
<223> n is a, c, g, or t


<220>
<221> misc_feature
<222> (42)..(42)
<223> n is a, c, g, or t


<220>
<221> misc_feature
<222> (44)..(45)
<223> n is a, c, g, or t


<220>
<221> misc_feature
<222> (50)..(50)
<223> n is a, c, g, or t


<220>
<221> misc_feature
<222> (57)..(59)
<223> n is a, c, g, or t


<220>
<221> misc_feature
<222> (70)..(70)
<223> n is a, c, g, or t
```

<220>
<221> misc_feature
<222> (74)..(74)
5 <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (80)..(80)
10 <223> n is a, c, g, or t

<400> 53
gatcagacaa gancntggtc cacagcggga cgagagntct cnannctgcn ggggagnnnc   60

15 caagtacgcn agcnctgaan ctaaagcaag caagaaaaag   100

<210> 54
<211> 515
20 <212> DNA
<213> Human

<400> 54
atatggcaag gataacccct atacttctgc ataatgaatt aactaaaata acttgcaagg   60
25
agagccaagc taaacccccg ataccgacga gtaccagaac aggtaagcac cccgtctatg   120

tagatatggg aagattatag gaggcgacaa ctaccgagcc tggtgatagc tggtgtccaa   180

30 gaagagtctt agttcattta tttggcccag aaccctctaa tccccttgta atttatgtca   240

agaggaacag ctctttggac actggaaaac cgtgagagag taagatttac acccttaggg   300

gcctaatagc agccaccatt aagaaagcgt tcgctccaca cccactacct aaaaatcgaa   360
35
tataactgac tcctcacacc caattggcca atcattcccc tataaaagaa ctatgttagt   420

ataagtaacc tgaaaacatt ctcctctgca taagccctgc gttggattat atcctgcact   480

40 gacaattaac tgccccaata tctacaatcc aaccc   515

<210> 55
<211> 176
45 <212> DNA
<213> Human

3263

<220>
<221> misc_feature
<222> (5)..(5)
5   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (32)..(32)
10   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (40)..(40)
15   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (60)..(60)
20   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (62)..(62)
25   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (76)..(76)
30   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (107)..(107)
35   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (155)..(155)
40   <223> n is a, c, g, or t

<400> 55
tgttnaggat caaattataa tattgaaata anaacagctn acatttatat agcatgtttn   60

45   cntatctcaa ctaatnataa atgggaaaat gggcaactgg gcaggcngaa cccagaggga   120

agcctgccct cattagacca agacagcaag gtttnccctg gtcactagat gaaatt   176

3264

<210> 56
<211> 317
<212> DNA
<213> Human

<220>
<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

<400> 56
cagnagtgat gttgcaatat ctggaactag caaaggatac tgatgagaaa acgtggaatc   60

atgtgggatg tgacctccta ggactcacct tgcacagctg ggtgcagcag ggataggtaa   120

ggatttgggg tttagaggta caattgcctt tttatggtta gagaaaggtc ctggggctgg   180

agggagcctg acgatctgct ctgtgtgcaa ggggagagtt aactctgcac gcaagagcct   240

gcttaaaggg ctgtgtcagt tctattgtaa acaccaactt aaagtggtgg atgctggcag   300

acattgttat tgccatt   317

<210> 57
<211> 209
<212> DNA
<213> Human

<400> 57
ctcatacacc tgtggctact gttttctaca gagtgccaaa actattcgag agaataggct   60

ctggactgga cactgtatac ccacatgcaa gatgaagttg gccccttaca tcctatacgc   120

aggagaattg cgtcatttaa agcctgttga cgcttttctc ccgcagacga atggaaagat   180

taattgggag tgggggctga aacaattcg   209

<210> 58
<211> 262
<212> DNA
<213> Human

<400> 58

aattttgctg ttacatggtg gctcaactga gtcccatact ttgaaggccg ggagttaatc   60

acctggtcac cgagttgcga accagcctcc aatatgtgga accctgtact ctctaaaaat   120

caaatcaccg gcatggagat tgcgcctgtg gtcccaaaat actcgggctg ggacacgatg   180

agttgcttgg cccaaggaag gagggttgta tggctgatca cactggtccg cctgggtgac   240

agagcgagac tccatctcta at   262

<210> 59
<211> 430
<212> DNA
<213> Human

<400> 59

gtcagtttat ttctgactag ggatattttc tttccattta gaaagaaga aaaaaaaaa   60

aaacctttat tgtcttacag gggggaacta gcgcggggct gaataaaacc tttggccctt   120

cccgggggag gggtatccgg tttataaacc ccaagggtat tttcttagca aaatacttaa   180

aaccggccgg ggttttata caaactggga acccacttt gaaaaatttt ggccttttga   240

tctgggatgg gaatatgagt ttttatacat ttcattttct ttttgggcaa aggcccggtt   300

aagtattccc ccccgggggg cctttacaaa aagggcggtt ttaaaagctt ttgggccccc   360

ctagggaatt gttttaacac ctaaaaaccc ctgcttccct taaaggggcg ttctttaatt   420

tgggggcggc   430

<210> 60
<211> 350
<212> DNA
<213> Human

<400> 60

aaacctctct aactatatat cacaataacc tgcgcataag atttacgctc cgatcttttc   60

atcctactag cttggaggat ttgaaccgat tatgaatacg caatactccc ggtcctcatg   120

tatcatgtgt aagcccatct cctgggaggg ctaacatact accatctcca aggagaggca   180

tgattccgaa tcacccacag acagctcgat caccatacgt atcacccaac atatatacct 240

tctaagactt gctagaaaca accaccacat ttgatgctta atcaccactc tgacgcgcat 300

5   taaagtgagg ggactctcct aatttctgta agttgatttt tgcattctga 350

<210> 61
<211> 515
10 <212> DNA
<213> Human

<400> 61
cacataaatt ctccataagt taattagtga ttttaacatg atctcaatat aaacatagca 60
15
cactttcttt gagaattcaa catattgcaa gttaaaattt tcatagacta cacaagaaag 120

aataatcagg caaatcctta agaataaggg caattaagga tgactagccc tacaagattt 180

20 taaaaaggat tcattagttt aaaaaatgtg atgtagatac atgaataaaa taaaatcttg 240

aagtagatcc aaatatacat ggtcagattg aatacaataa agatggcatc gtagcagtgg 300

agaaaagaag aattatttca taaaccttgt tggaatggct aggcaatcat ctggaaaaaa 360
25
atgaagttga ataataaaaa tatattctac actagcacaa attataaata aagcagtgat 420

ttaaatgaga aaaattaaat cataatgatt tcaaagataa cataggataa tttctttata 480

30 gtcttctaaa atatatgact ttatgaattc tgact 515

<210> 62
<211> 611
35 <212> DNA
<213> Human

<400> 62
caagtacttt accaactaag ccaatcttgt ccccagccag gcatttctat acaaagggcc 60
40
aagactttgg ttttataaat aaggaggtat atataaatta tatatatttc tgagctgagt 120

aataatccac cagatacaag tttgcatcaa cttctgtgaa atattttttt tccttttttgt 180

45 tgggcatttt tatggtctaa atatagaatg accaatgcct ctagaacaaa cttgacctgg 240

tcagtgttat caagaagcag actgtttctt actttctttg tatttcctta cttatttaaa 300

tttgttaaaa ttgatatatt gatatataaa acttcttttg ccagtgttgg tggcacacgc 360

ctttaatccc agcacttagg aggcagaggc agggtggatt tctgaatttg agggcaggct 420

agtctacaga gcaagttcca ggtcagccaa ggctatatat agaaactctg gcatgaaaaa 480

ccaaccaaac caaaccaaac caaaccagac cagaccagac cagaccagac caaaccaaac 540

caaaccagac taaaccaaac caaaccagac cagaccagac cagaccagac cagaccagac 600

cagaccaaac t   611

<210> 63
<211> 291
<212> DNA
<213> Human

<400> 63
ccgagagatt ggccactgct taaactcatg cagctcctac tgttcttcaa ttaatgcctt 60

taatgcgaat atacttcctc ttctttttgc atggtcttgc ccagcctctg caatactgat 120

gaacacatgc tgaagatcat ctaactcaat atggcgcata tttctatgtc ttgctgccca 180

ggacatagga caacttcgtc gctcactagt tctaacatat taatgctggc gtaggtggag 240

aactactgca catatactct tactcggagg ctgaggcacg aggatcactt g 291

<210> 64
<211> 309
<212> DNA
<213> Human

<400> 64
gccagatgcc gtgtttcctc gatgaactct ttacatcatt ggctattcag tggagtgttt 60

cattatcacc tctcactctc gcgtgttacc taactctccc tcgcagggga aatcactcca 120

tatatttcaa atgtcttgct aacagtggtt actttgctct atccttagct atacgtctcg 180

aggcacattg ttcctctatg ccccgctacg ctttgcccta gagctcggcg gtatctatat 240

cttaactgcc ctcttgatcc ttacgtgccg gagaaggtgg aggcagaaat tttgtcaaat 300

ctgattaga   309

<210> 65
<211> 278
<212> DNA
<213> Human

<400> 65
tagaatggaa tggagtcgaa tgtgatggaa tggacgcgaa tggaatggaa tggactcgaa   60

tggaataaag tggaatagac tcgaatggaa tggaatgcaa tggaatggac tcgaatggaa   120

agggatggaa tggactcgaa gggaatggaa tggaatggat tcgaatggaa aggaatggaa   180

tggactcaaa aggaatggaa tggaatggac tcaaatggaa tggactcgaa ttgaatgaaa   240

tgtaatggaa tagactcgaa tggaatggaa cgaaattt   278

<210> 66
<211> 142
<212> DNA
<213> Human

<400> 66
agttctcctt aggttaatta atggaatgca atcccaatga aaatgtcacc aaagttgttt   60

ttttttttaac tgtaggaggt ttataataat gctcatatgg aaaaataaaa catgtaaaaa   120

atagctagta aactccccct gt   142

<210> 67
<211> 286
<212> DNA
<213> Human

<400> 67
atatctgcca tcctcatcgg ccaatcgtgt tattttgatg acgaatgctt cggagattgg   60

aaagatgatc tcctcatgct tccatgcact gcgagtagaa gacatactga gcatagtgtg   120

attattttcc caacaaattg gcattcatag atagaataag ctgactaaga ctacttagcc   180

ccacattttt ttctacttgc tccaatagca ctaacaaata ggaagctctt gcttgctccc   240

caaagctcca tttccttgaa agcagaagtg taatattact tcttag   286

<210> 68
<211> 179
<212> DNA
<213> Human

<400> 68
atctactttt tattcttttg ataaatgttt atgaaatata aaatactgaa aattagaaag   60

tagaagtcat tattttatta taaaacatgt ggattagata ttttcattta tgtgattaaa   120

ctttctaaac aaagattata tgaattatct taaagattta aaaagtaatt aagttaaat   179

<210> 69
<211> 390
<212> DNA
<213> Human

<220>
<221> misc_feature
<222> (356)..(356)
<223> n is a, c, g, or t

<400> 69
cagataagac tattaagaca gataagagcc aaatcatgta gagcctcaga ggttttttgat   60

cttcagtcta agaacgtaaa tccatggaag aatttttaagc aggggtgtgc cttgaccaca   120

ttttgaattc taaactgtct ctgggtgggt gtgggtgcca ccaagagcat gtgttcatgt   180

agggagactg gttttttaca gttgtctatg agagagatga cagttgcctg gattatggtg   240

gtgacattgg agataagcag gtagacagat tctcagtgta ttaggagaga aaaatcaata   300

ggaaatttaa aataaataat taactgtggc cataggagga aggagtcttt gggttnggtt   360

ctcaatttct gcatgagaaa aaaggtggac   390

<210> 70
<211> 481
<212> DNA
<213> Human

<220>
<221> misc_feature
5   <222> (26)..(26)
<223> n is a, c, g, or t

<400> 70
atgatgaaat gatgagatga aatgcntgag atgagatgtg atgaaatgat gatatgaaat   60

10

gatgacataa aatgagatga aatgagatgt aatgatggaa tgagatgaga tgaaatgaga   120

tgaaatgata gatgagataa aatgatgata tgaaatgatg agatgaatga tgagatgatg   180

15   agatgaatga tgaaatgaaa tgatgagatg agatgatgaa atgaaatggt gagatgaaat   240

gatgagatga aatgaaatag tgaaatgaaa ttgaaataaa atcgaaatga gagatgaaat   300

gatgagatga tgaaattgat gaaatgatga gatgtgatga gatgaaatga tgagatgaga   360

20

tgagatgaca tgaaataatg aaatgaaatt gaaatgagat aagatacgag ctgagatgca   420

atgagatgaa atgatgagat gaaatgaaat agtgaaatga aattgaaata aaatcgaaat   480

25   g   481

<210> 71
<211> 125
30   <212> DNA
<213> Human

<220>
35   <221> misc_feature
<222> (5)..(5)
<223> n is a, c, g, or t

<220>
40   <221> misc_feature
<222> (19)..(19)
<223> n is a, c, g, or t

<220>
45   <221> misc_feature
<222> (29)..(29)
<223> n is a, c, g, or t

```
<220>
<221> misc_feature
<222> (38)..(38)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (42)..(42)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (45)..(45)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (49)..(49)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (61)..(61)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (77)..(77)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (79)..(79)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (88)..(88)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (90)..(90)
<223> n is a, c, g, or t

<220>
```

<221> misc_feature
<222> (100)..(100)
<223> n is a, c, g, or t

5 <220>
<221> misc_feature
<222> (110)..(110)
<223> n is a, c, g, or t

10 <400> 71
cggtngcaat tgggggccnc atacgcgcng acgagtantg gncangctnc ttgactacac   60

ngacgcgccg tacaggntna attatggnan cttacatggn aaaggggcan ctcaatgtcc   120

15 cacag   125

<210> 72
<211> 473
20 <212> DNA
<213> Human

<220>
25 <221> misc_feature
<222> (151)..(151)
<223> n is a, c, g, or t

<400> 72
30 gaaatgaaat aatgaaatga gatgaaataa cgaaataaaa ttgaaatgag atgagaggaa   60

atgagatgaa atgttgaaaa gaaaggagga aatgatgagg tgagatgaaa tgatgagatg   120

aaatgaatct gagatgaaat gagatgaaaa ntgatacgaa aaatgatata aaaaatatga   180

35 cctgagatga aatgagatga aaaatgatac gaaaaatgat ataaaaaata tgacatgaaa   240

tgaaatgaga tgatatgaaa tgacataatg aaatgatgaa ttgatgatat tgaaatgaaa   300

40 ttgaaagatg agatgaaatg atgagatgaa atgaaatgtt gaaatgatga agagatgtga   360

catgaaatga gctgaaatga gatgaaatga aatgagatta aatgatgaga tgaaaaatga   420

tgagatgaaa aatgagatga gatgatgaga tgagatgaga tgaattgaga tga   473

45

<210> 73

3273

<211> 500
<212> DNA
<213> Human

<220>
<221> misc_feature
<222> (7)..(7)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (16)..(16)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (233)..(233)
<223> n is a, c, g, or t

<400> 73

aatgagnatg aaaagnatga aatgatgaga tgaaatgaaa tgatgagatg aaatgaggtg   60

aaatgaaatt agatgaaatg taatgagatg aaatgaaatg acctaatgaa atgaaataat   120

gaaatgagat gaaataaaat aatgaaatga tgaaataatg aaatgaaaat gagatggaaa   180

tgatgagatg agaagaaatg atgagatgaa atgatgaaat gatgagatga ganaaaatga   240

gatgaaatga tgagatgaga tgaaatatga tgagttgaaa tgacataatg aatgaaatga   300

tgaaatggaa taatgaaatg gaaatgatga gctgagatgc aatgagttga aatgagatga   360

aatgatgaaa tgatgagatg aaatgatgaa atgaaataat gaaatgagat gaaataaaat   420

aatgaaatga tgaaataatg aaatgaaaat gaaatggaaa tgatgagatg agaagaaatg   480

atgagatgaa atgatgaaat   500

<210> 74
<211> 299
<212> DNA
<213> Human

<220>

<221> misc_feature
<222> (31)..(32)
<223> n is a, c, g, or t

5 <220>
<221> misc_feature
<222> (57)..(57)
<223> n is a, c, g, or t

10 <400> 74
ggaaatcctg aagtggaaat gatgagctga nntgcaatga gttgaaatga gatgaancga   60

tgaaatgatg agatgaaatg atgagatgag atgtgatgaa atgatgatat gaaatgatga   120

15 cataaaatga gatgaaatga gatgtaatga tggaatgaga tgagatgaaa tgagatgaaa   180

tgatagatga gataaaatga tgatatgaaa tgatgagatg aatgatgaga tgatgagatg   240

aatgatgaaa tgaaatgatg agatgagatg atgaaatgaa atggtgagat gaaatgatg   299
20

<210> 75
<211> 155
<212> DNA
25 <213> Human

<400> 75
agtgaaatga aattgaaata aaatcgaaat gagatgagat gaaatgatga gatgatgaaa   60

30 taaaatgatg aaatgatgag gtgatgagat gaaatgatga gatgaaatga tgagatgaga   120

tgagatgaca tgaaataatg aaacgaaatt gaaat   155

35 <210> 76
<211> 367
<212> DNA
<213> Human

40
<220>
<221> misc_feature
<222> (11)..(11)
<223> n is a, c, g, or t
45
<220>
<221> misc_feature

<222> (35)..(35)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (37)..(38)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (43)..(43)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (56)..(56)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (67)..(67)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (71)..(71)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (75)..(75)
<223> n is a, c, g, or t

<400> 76
atagcaaaag ngggtaaaac ccctgagttt gcganannag tantcttgta ggggcnaact   60

ctacttnaga ngaantcctc gcaaaatcct tgaatcaccg cttcagtgca gtgatatcac   120

cgccatgaaa tttctgctcg attagcttac gttgtttgga tagaggccaa acaaggctgt   180

tatcggtacg aggaatggat gttcgatttc gtagaatacg cctgagagac ggcgaatact   240

ctcacgagag gcagcaggcg cgtaaattac ccaattacaa caagtagagg tagcgaagga   300

aaatatgagg ggtggcaagg ttttgcctgt tacattctca aatggaagca aattagatat   360

gtcattg   367

<210> 77
<211> 257
<212> DNA
<213> Human

<220>
<221> misc_feature
<222> (6)..(6)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is a, c, g, or t

<400> 77
actagnacag naattttagc taagtggagt ttgagttaag tggagatgtg agaccatctc   60

atagaaatca ttatttctgt gggatggata attgggccaa attgtaaaat attttaacta   120

tcagtgtttg gggtttattt ttaaaagaat agggtgccac cagatgttct ttagtggagg   180

agaaatgagg ccagagtgac tgcctagaaa attaagttgg taaattaatc actttttct   240

aggtcctttc ttagtct   257

<210> 78
<211> 373
<212> DNA
<213> Human

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (20)..(20)
<223> n is a, c, g, or t

<220>

<220>
<221> misc_feature
<222> (24)..(24)
<223> n is a, c, g, or t

5   <220>
<221> misc_feature
<222> (31)..(31)
<223> n is a, c, g, or t

10 <220>
<221> misc_feature
<222> (38)..(38)
<223> n is a, c, g, or t

15 <220>
<221> misc_feature
<222> (53)..(53)
<223> n is a, c, g, or t

20 <220>
<221> misc_feature
<222> (61)..(62)
<223> n is a, c, g, or t

25 <220>
<221> misc_feature
<222> (66)..(66)
<223> n is a, c, g, or t

30 <220>
<221> misc_feature
<222> (83)..(84)
<223> n is a, c, g, or t

35 <220>
<221> misc_feature
<222> (92)..(92)
<223> n is a, c, g, or t

40 <220>
<221> misc_feature
<222> (109)..(109)
<223> n is a, c, g, or t

45 <220>
<221> misc_feature
<222> (115)..(115)

<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (146)..(146)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (153)..(153)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (166)..(166)
<223> n is a, c, g, or t

<400> 78
ctttaaaaac ntgttagacn aacnttaaaa nttacccntt ttcctgaact gantcctggg   60

nntaantaaa aagggtgaag aannttactt cncttggtcc taaaaaacnt tttcntcagt   120

tattaccaaa atatttggac cattantaaa gantagggcc aacccnaatt tttcttgaaa   180

tttccgttaa atagccgtta aatgtttta cccatttcat attggatacc ttaaattata   240

ataatggatt ttattgttaa attgtgtgtg tgtggtgtgt atgccctgtc ttttctcctc   300

taccattatt gtcactttat gtttggaacc ccctttaccc ttccttaaag gaaaaaaagg   360

gccccggggtt ttt   373

<210> 79
<211> 128
<212> DNA
<213> Human

<220>
<221> misc_feature
<222> (10)..(10)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (20)..(20)

<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (29)..(30)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (35)..(35)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (49)..(49)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (92)..(92)
<223> n is a, c, g, or t

<400> 79
tcctagtaan ctggtttacn ctgaaagann aagangcctc ccctgttcnc tgaaatacca   60

ccttgatgtt caagtattta agaccctatg cnaatatttt ttacctttc taataaaacca   120

tgtttgtt   128

<210> 80
<211> 213
<212> DNA
<213> Human

<220>
<221> misc_feature
<222> (9)..(9)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (88)..(88)
<223> n is a, c, g, or t

<220>

```
<221> misc_feature
<222> (98)..(98)
<223> n is a, c, g, or t

5   <220>
<221> misc_feature
<222> (105)..(105)
<223> n is a, c, g, or t

10  <220>
<221> misc_feature
<222> (107)..(107)
<223> n is a, c, g, or t

15  <220>
<221> misc_feature
<222> (127)..(127)
<223> n is a, c, g, or t

20  <220>
<221> misc_feature
<222> (142)..(142)
<223> n is a, c, g, or t

25  <220>
<221> misc_feature
<222> (147)..(147)
<223> n is a, c, g, or t

30  <220>
<221> misc_feature
<222> (161)..(161)
<223> n is a, c, g, or t

35  <220>
<221> misc_feature
<222> (166)..(167)
<223> n is a, c, g, or t

40  <220>
<221> misc_feature
<222> (171)..(171)
<223> n is a, c, g, or t

45  <220>
<221> misc_feature
<222> (180)..(180)
```

<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (196)..(196)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (206)..(206)
<223> n is a, c, g, or t

<400> 80
cccattggna cagaccccca aaatgggtac attttttagg aaaccaggac ctttccaagg   60

ggccaggcct tccctttaaa aaaaaatnac cgtttttngg gggangnaac ctttaaaagg   120

ggaaaanaaa tcctttttaa anggaantcc aagggaagga ncctgnncaa nacttccccn   180

ccaataaaaa aaaccntttt ggaaangggg aaa   213

<210> 81
<211> 443
<212> DNA
<213> Human

<220>
<221> misc_feature
<222> (22)..(22)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (33)..(34)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (39)..(39)
<223> n is a, c, g, or t

<400> 81
gaaatgagat gaaaccatga gnatgaaatg aannaatgnc atgcaaatga tgagatgaaa   60

tgatgaaatg agatgagatg agaagaaatg acttgatgag atgagataaa atgatgaaat   120

gaaatgaagt gaaatgaaat tgaaatgaga tgagatgaaa tgagataaaa tgatgagatg   180

aaatgagaag aaatgagatg aaatgatgaa atgatgagat gagatgaaaa atgatgggat   240

gagaaatgag atgaaatgat gggatgaaat gaaatgaaat aatgaaataa tgaaatgaaa   300

tgaattgata atattgaagt gaaattgaaa gatgagattg gatgaaatga tgagatgaaa   360

tgaaatgttg aaatgaaatg aagagatgta acatgaaatg agctgaaatg atgagatgaa   420

atgaaatgaa atgagattaa atg   443

<210> 82
<211> 442
<212> DNA
<213> Human

<220>
<221> misc_feature
<222> (13)..(13)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (16)..(16)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (33)..(33)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (46)..(47)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (78)..(78)
<223> n is a, c, g, or t

<220>
<221> misc_feature

3283

<222> (82)..(83)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (121)..(121)
<223> n is a, c, g, or t

<400> 82
tggcccggga acntcnaact gcccatcctg gantttggg ggggganctt taaaaaacct   60

gacctctgaa tgtattantg anncaagtga tagccaagat attttgaaga aaaatagata   120

ntagggacct gctctataag cccatcataa tttattatga agttataaca agtaaaacag   180

taaggtattt ggcatggaat agagaaccca gaaacagacc caatgcatgg gtacaggata   240

taacacaggg aaatgaggga caatatatgg ttctgggata attatttata tggggaaaat   300

aaagaaattg gatccctacc tcacacatac aaaaaaaatc ataattgaat taaaaacttg   360

catgtgaaag gaaagacttt aaaacattta gaaaaagtat tggaggctat gatcttgggg   420

taggaaagca tttcttttt tt   442

<210> 83
<211> 135
<212> DNA
<213> Human

<220>
<221> misc_feature
<222> (8)..(8)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (36)..(36)
<223> n is a, c, g, or t

<400> 83
gtctaacnta aaaagtaaag aaagtaaagt aaaggnttga aggaaggaag gaaggaagga   60

aggagggaaa agaaagaaag gaaggaagga aggaaaagaa agaaagaaag gaaggaagga   120

3284

aggaaggaag gaagg   135

<210> 84
<211> 346
<212> DNA
<213> Human

<220>
<221> misc_feature
<222> (30)..(30)
<223> n is a, c, g, or t

<400> 84
ggaggaggaa gagtgatgag ttctctaatn acttggttgg attagcctta gagttatcgg   60

gagttgcctt ctgtaagtgc ccctactatc aaggtttcat ggaaaatcta ggcaaggcag   120

aacttcctca gaaggacaag agacaaagaa gtgggggagg ccctcctatc catagctgag   180

agggtttatt ctttgtggtt ctgctgtcag agcctttgga tgtctgatct gagatggagc   240

aacccccagct agacagaact ttgtagattt tggggggttt aaaaggcctc aagcaaattc   300

taaaactttc tttgaacccc ctggcatagg ctcagtttcc ctgact   346

<210> 85
<211> 100
<212> DNA
<213> Human

<400> 85
acaaaaagcc cctttaaact tgggcccgct cgaggtcgtt tcgactgggc cgagacttcc   60

gaaaagaaaa tggtttttttt tgccgaaatc aaccgggtaa   100

<210> 86
<211> 201
<212> DNA
<213> Human

<400> 86
ttcataacat cgtcattttg ggttatgcga aatacaaatt taaatctttg tgaaatgaaa   60

3285

gaaaagagga agaaacgctt tttaggagtt aaggattaaa gtaaaaatta ttttgacata   120

attacctctt tttgtgacca ctcttaaagg ccaggaacat atttggagaa gcctagttgt   180

5   atgtaacagt gtggggtttc a   201

<210> 87
<211> 531
10 <212> DNA
<213> Human

<400> 87
tatagcgggc gttataaaca taccacttcc cggtacaacg gatttcaagg ttaggggtgc   60
15
aacccagaac gaacgcgtta agtgcgcgtt atcttcctag gatagagtcg gtgacgggaa   120

tcttttaccc cggcactcgg gtccaccctc gcggcaccag aggtattctc cggcgagtcg   180

20 ttaaccatcg caatcgccga ccgagtttaa ggaccactcc ccacctttct cattagttaa   240

ggagaacgct actttacccc atagacggag aaatcgctac tcaactacca ggcgcgcgcc   300

gtcgagtccc tcttcctctc tttatgcatt tagagcgctt tcgtaagagt tttccctaga   360
25
ttcttctaag cgtagcgcgt ctactccaat gttttcgtta atccagcccg aactaacgcc   420

gcggaggagt cgatccgtct actcctatcc cgtcggctcg gatttactac aggagctaag   480

30 aaaacaaaaa gtaccagccc taaaggaaag tcaaaggacg cccgtaaaaa a   531

<210> 88
<211> 530
35 <212> DNA
<213> Human

<400> 88
aatctcgatc gcaaacatac ggcactctcc ctcttgccgc ggttttcgtc cagcgctttc   60
40
cattcggtcc agtgcctcgc cctattagcc cttaagccca ccgtttctaa aactcccaga   120

acagccaaac cggtccgccc aaggcctccg tcgtttttata atatattccg tttacgtata   180

45 aggaacgaac ccccccttcat taccacggtc ccgcgtccgc ctccttctcc attcgcaaca   240

gttctattcc tttcagcctc ccgtacctgc ttccagaaca tcgcaccgcc atagtcgaaa   300

gatagcaaag attacccagc ttctattcct cgccccagag ccgagtaaat cgaagtttat   360

agaggcggaa tccaaccatt caagagttat aacaagttat cggcactcgg gggatcagaa   420

tataaactta atgtcccctt tattctcccg gacgcccctt ttaaccactt cttcctatct   480

ttcgctaaca agccattgac ggcgctttgc cgcgcgggcc catctcgcgt   530

<210> 89
<211> 332
<212> DNA
<213> Human

<220>
<221> misc_feature
<222> (37)..(37)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (47)..(47)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (108)..(108)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (112)..(112)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (129)..(129)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (134)..(134)
<223> n is a, c, g, or t

<220>

<221> misc_feature
<222> (152)..(152)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (168)..(168)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (196)..(196)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (239)..(239)
<223> n is a, c, g, or t

<400> 89

```
ccatttatgg gccgggggata tacccacatg gtacagnaca ttacatnttt atggcaccat    60

ttccaccggc ctggttttgg tttttccata attaattaac caggggggncc anttaaaaaa   120

aattaaggna aggnttaaaa aatttaacca anggggggtt taaagggntt ttttttttta   180

aaaaaaaagg ttaaanccccc cccttttttt ttgggttggg gtgggaaaat tttgggaanc   240

cttaacccccc gggttttgg gttttttttgg ccaaaacccc ccggaaaaaa attaaaaaaa   300

ggaccggttt ccattttaat gggtattggg aa                                 332
```

<210> 90
<211> 185
<212> DNA
<213> Human

<400> 90

```
actgctataa tgcaggggaa catgttctca gggtcatcct gaggggttgt gtcatgggggc    60

cggtggtaac tattaaaaca taagtttaat cggtatttaa aattttaaaa tcaaaaaaaa   120

taaaatatat gcaaccctcc attccaagga agtatgatgt tactagatta tctgaaaatt   180

ctcct                                                               185
```

<210> 91
<211> 365
<212> DNA
5   <213> Human

<220>
<221> misc_feature
10   <222> (326)..(326)
<223> n is a, c, g, or t

<220>
<221> misc_feature
15   <222> (338)..(339)
<223> n is a, c, g, or t

<220>
<221> misc_feature
20   <222> (344)..(344)
<223> n is a, c, g, or t

<400> 91
ccagagagcc acaaatgacc aaaatatttt gagatgaaca tgctcgtaga aggtagctga   60
25
ctagggggta cttgaaaatg ctagaccagg ataactccta agtgtatatc cttggcagac   120

tcgttatgct ttccaatcct gcttgcaata taagacacaa agtcagaata aagctcaaga   180

30   aaacagaacg tgcaggccat caagcgcaga gcctgctcat tggacaaccg caaagagtag   240

taagtgctgc cgctattcac acttagaaaa ggagaaccac ggggaaaaac caaattaatg   300

gggctgcttt ttgtcactct ggcatnagag aattgtgnng aaantttaac ttttgtaagc   360
35
ttgta   365

<210> 92
40 . <211> 113
<212> DNA
<213> Human

45   <220>
<221> misc_feature
<222> (32)..(32)

<223> n is a, c, g, or t

<220>
<221> misc_feature
5   <222> (34)..(34)
<223> n is a, c, g, or t

<400> 92
acttgacctt atggatgatg ctgcggagtg cntngtaagt gtttcatgat attccttaag   60
10

aagtcaggat agtagttttc attccttaga tggtacaagt gttgagacaa atg   113

<210> 93
15 <211> 210
<212> DNA
<213> Human

<400> 93
20 gttttaggga aatttgccag ttttatgttt taatattttt ggaaggaaaa ctgaaaggta   60

atgaaaatgt tactgttgga ttaaaaaaca aattaagtcc aaatagtgat taggcaagtt   120

ggtgaggtag ggggttgctg caagagcgga agttgaaaga tcttggaaaa attaaagaaa   180
25

cttcatagaa ccccatctct acaccaaaaa   210

<210> 94
30 <211> 506
<212> DNA
<213> Human

35 <220>
<221> misc_feature
<222> (5)..(5)
<223> n is a, c, g, or t

40 <220>
<221> misc_feature
<222> (25)..(25)
<223> n is a, c, g, or t

45 <220>
<221> misc_feature
<222> (38)..(39)

<223> n is a, c, g, or t

<220>
<221> misc_feature
5   <222> (44)..(44)
<223> n is a, c, g, or t

<220>
<221> misc_feature
10 <222> (46)..(46)
<223> n is a, c, g, or t

<220>
<221> misc_feature
15 <222> (59)..(59)
<223> n is a, c, g, or t

<220>
<221> misc_feature
20 <222> (66)..(66)
<223> n is a, c, g, or t

<220>
<221> misc_feature
25 <222> (70)..(70)
<223> n is a, c, g, or t

<220>
<221> misc_feature
30 <222> (74)..(74)
<223> n is a, c, g, or t

<220>
<221> misc_feature
35 <222> (80)..(80)
<223> n is a, c, g, or t

<220>
<221> misc_feature
40 <222> (82)..(84)
<223> n is a, c, g, or t

<220>
<221> misc_feature
45 <222> (86)..(86)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (90)..(92)
<223> n is a, c, g, or t

5

<220>
<221> misc_feature
<222> (112)..(113)
<223> n is a, c, g, or t

10

<220>
<221> misc_feature
<222> (117)..(117)
<223> n is a, c, g, or t

15

<220>
<221> misc_feature
<222> (126)..(126)
<223> n is a, c, g, or t

20

<220>
<221> misc_feature
<222> (129)..(129)
<223> n is a, c, g, or t

25

<220>
<221> misc_feature
<222> (133)..(136)
<223> n is a, c, g, or t

30

<220>
<221> misc_feature
<222> (152)..(152)
<223> n is a, c, g, or t

35

<220>
<221> misc_feature
<222> (156)..(157)
<223> n is a, c, g, or t

40

<220>
<221> misc_feature
<222> (162)..(162)
<223> n is a, c, g, or t

45

<220>
<221> misc_feature

```
<222>  (164)..(165)
<223>  n is a, c, g, or t

       <220>
 5     <221>  misc_feature
       <222>  (174)..(174)
       <223>  n is a, c, g, or t

       <220>
10     <221>  misc_feature
       <222>  (178)..(178)
       <223>  n is a, c, g, or t

       <220>
15     <221>  misc_feature
       <222>  (181)..(181)
       <223>  n is a, c, g, or t

       <220>
20     <221>  misc_feature
       <222>  (185)..(187)
       <223>  n is a, c, g, or t

       <220>
25     <221>  misc_feature
       <222>  (190)..(191)
       <223>  n is a, c, g, or t

       <220>
30     <221>  misc_feature
       <222>  (194)..(194)
       <223>  n is a, c, g, or t

       <220>
35     <221>  misc_feature
       <222>  (206)..(206)
       <223>  n is a, c, g, or t

       <220>
40     <221>  misc_feature
       <222>  (227)..(227)
       <223>  n is a, c, g, or t

       <220>
45     <221>  misc_feature
       <222>  (231)..(231)
       <223>  n is a, c, g, or t
```

<220>
<221> misc_feature
<222> (235)..(235)
5   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (244)..(244)
10   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (247)..(247)
15   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (251)..(251)
20   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (255)..(255)
25   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (258)..(258)
30   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (260)..(261)
35   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (263)..(263)
40   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (270)..(270)
45   <223> n is a, c, g, or t

<220>

<221> misc_feature
<222> (273)..(276)
<223> n is a, c, g, or t

5   <220>
<221> misc_feature
<222> (285)..(285)
<223> n is a, c, g, or t

10   <220>
<221> misc_feature
<222> (287)..(287)
<223> n is a, c, g, or t

15   <220>
<221> misc_feature
<222> (291)..(292)
<223> n is a, c, g, or t

20   <220>
<221> misc_feature
<222> (302)..(302)
<223> n is a, c, g, or t

25   <220>
<221> misc_feature
<222> (305)..(306)
<223> n is a, c, g, or t

30   <220>
<221> misc_feature
<222> (311)..(311)
<223> n is a, c, g, or t

35   <220>
<221> misc_feature
<222> (318)..(319)
<223> n is a, c, g, or t

40   <220>
<221> misc_feature
<222> (321)..(321)
<223> n is a, c, g, or t

45   <220>
<221> misc_feature
<222> (327)..(329)

<223> n is a, c, g, or t

<220>
<221> misc_feature
5 <222> (333)..(333)
<223> n is a, c, g, or t

<220>
<221> misc_feature
10 <222> (348)..(349)
<223> n is a, c, g, or t

<220>
<221> misc_feature
15 <222> (352)..(352)
<223> n is a, c, g, or t

<220>
<221> misc_feature
20 <222> (357)..(357)
<223> n is a, c, g, or t

<220>
<221> misc_feature
25 <222> (363)..(363)
<223> n is a, c, g, or t

<220>
<221> misc_feature
30 <222> (366)..(367)
<223> n is a, c, g, or t

<220>
<221> misc_feature
35 <222> (369)..(369)
<223> n is a, c, g, or t

<220>
<221> misc_feature
40 <222> (371)..(371)
<223> n is a, c, g, or t

<220>
<221> misc_feature
45 <222> (376)..(377)
<223> n is a, c, g, or t

```
<220>
<221> misc_feature
<222> (385)..(385)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (390)..(390)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (398)..(398)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (401)..(401)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (405)..(405)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (420)..(420)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (429)..(429)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (437)..(437)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (440)..(440)
<223> n is a, c, g, or t

<220>
<221> misc_feature
```

5

10

15

20

25

30

35

40

45

<222> (442)..(443)
<223> n is a, c, g, or t

<220>
5   <221> misc_feature
<222> (453)..(453)
<223> n is a, c, g, or t

<220>
10   <221> misc_feature
<222> (455)..(456)
<223> n is a, c, g, or t

<220>
15   <221> misc_feature
<222> (473)..(474)
<223> n is a, c, g, or t

<220>
20   <221> misc_feature
<222> (477)..(477)
<223> n is a, c, g, or t

<220>
25   <221> misc_feature
<222> (481)..(481)
<223> n is a, c, g, or t

<220>
30   <221> misc_feature
<222> (487)..(488)
<223> n is a, c, g, or t

<220>
35   <221> misc_feature
<222> (495)..(497)
<223> n is a, c, g, or t

<220>
40   <221> misc_feature
<222> (500)..(500)
<223> n is a, c, g, or t

<220>
45   <221> misc_feature
<222> (502)..(502)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (506)..(506)
5   <223> n is a, c, g, or t

<400> 94
ttggnggggg ggcgagatcc tactngagac ccttgatnnt gggnanggac cgaagatcna   60

10   ttaganaccn atgngatggn cnnncnaaan nnttaaagtg agagtccatc tnngaanaaa   120

atgggnaant ttnnnngggg ggggggaaaa ancccnnggg tnannggggg cccngggntt   180

naaannnggn nctnggggg ggaaantttt ggcccccccc cggggggnttt ncctnaaaaa   240
15

aaanccnttt naaanacngn nanaattttn ccnnnncggg gaggngngga nntttttttt   300

tnaannagcc nttttgnna naaaaannnt ggncccccc ctattccnng gnttttngga   360

20   ccnttnnanc ntgggnnttt ttagnccttn aaaaaaangc naatnttaag gtaaaaattn   420

ggggggggng ggggggnggn gnnttttttt ttntnnggag gggttttttt ccnncgnggg   480

ngaaagnntg gggcnnnctn cngccn   506
25

<210> 95
<211> 400
<212> DNA
30   <213> Human

<220>
<221> misc_feature
35   <222> (11)..(11)
<223> n is a, c, g, or t

<220>
<221> misc_feature
40   <222> (24)..(24)
<223> n is a, c, g, or t

<220>
<221> misc_feature
45   <222> (40)..(40)
<223> n is a, c, g, or t

```
<220>
<221> misc_feature
<222> (48)..(48)
<223> n is a, c, g, or t

5

<220>
<221> misc_feature
<222> (51)..(51)
<223> n is a, c, g, or t

10

<220>
<221> misc_feature
<222> (71)..(71)
<223> n is a, c, g, or t

15

<220>
<221> misc_feature
<222> (80)..(80)
<223> n is a, c, g, or t

20

<220>
<221> misc_feature
<222> (83)..(83)
<223> n is a, c, g, or t

25

<220>
<221> misc_feature
<222> (91)..(91)
<223> n is a, c, g, or t

30

<220>
<221> misc_feature
<222> (95)..(95)
<223> n is a, c, g, or t

35

<220>
<221> misc_feature
<222> (99)..(99)
<223> n is a, c, g, or t

40

<220>
<221> misc_feature
<222> (111)..(111)
<223> n is a, c, g, or t

45

<220>
<221> misc_feature
```

<222> (115)..(116)
<223> n is a, c, g, or t

<220>
5   <221> misc_feature
<222> (118)..(118)
<223> n is a, c, g, or t

<220>
10   <221> misc_feature
<222> (121)..(121)
<223> n is a, c, g, or t

<220>
15   <221> misc_feature
<222> (123)..(124)
<223> n is a, c, g, or t

<220>
20   <221> misc_feature
<222> (126)..(126)
<223> n is a, c, g, or t

<220>
25   <221> misc_feature
<222> (129)..(129)
<223> n is a, c, g, or t

<220>
30   <221> misc_feature
<222> (131)..(131)
<223> n is a, c, g, or t

<220>
35   <221> misc_feature
<222> (133)..(133)
<223> n is a, c, g, or t

<220>
40   <221> misc_feature
<222> (135)..(135)
<223> n is a, c, g, or t

<220>
45   <221> misc_feature
<222> (148)..(148)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (153)..(153)
5   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (170)..(170)
10   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (173)..(173)
15   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (175)..(175)
20   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (177)..(177)
25   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (192)..(192)
30   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (195)..(196)
35   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (198)..(198)
40   <223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (200)..(201)
45   <223> n is a, c, g, or t

<220>

```
<221> misc_feature
<222> (211)..(212)
<223> n is a, c, g, or t
```

5
```
<220>
<221> misc_feature
<222> (219)..(219)
<223> n is a, c, g, or t
```

10
```
<220>
<221> misc_feature
<222> (222)..(223)
<223> n is a, c, g, or t
```

15
```
<220>
<221> misc_feature
<222> (226)..(226)
<223> n is a, c, g, or t
```

20
```
<220>
<221> misc_feature
<222> (231)..(231)
<223> n is a, c, g, or t
```

25
```
<220>
<221> misc_feature
<222> (240)..(240)
<223> n is a, c, g, or t
```

30
```
<220>
<221> misc_feature
<222> (243)..(244)
<223> n is a, c, g, or t
```

35
```
<220>
<221> misc_feature
<222> (249)..(249)
<223> n is a, c, g, or t
```

40
```
<220>
<221> misc_feature
<222> (255)..(255)
<223> n is a, c, g, or t
```

45
```
<220>
<221> misc_feature
<222> (269)..(269)
```

<223> n is a, c, g, or t

<220>
<221> misc_feature
5   <222> (280)..(280)
<223> n is a, c, g, or t

<220>
<221> misc_feature
10   <222> (283)..(283)
<223> n is a, c, g, or t

<220>
<221> misc_feature
15   <222> (289)..(289)
<223> n is a, c, g, or t

<220>
<221> misc_feature
20   <222> (293)..(293)
<223> n is a, c, g, or t

<220>
<221> misc_feature
25   <222> (311)..(311)
<223> n is a, c, g, or t

<220>
<221> misc_feature
30   <222> (324)..(324)
<223> n is a, c, g, or t

<220>
<221> misc_feature
35   <222> (326)..(326)
<223> n is a, c, g, or t

<220>
<221> misc_feature
40   <222> (341)..(341)
<223> n is a, c, g, or t

<220>
<221> misc_feature
45   <222> (348)..(348)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (350)..(350)
<223> n is a, c, g, or t

5

<220>
<221> misc_feature
<222> (354)..(355)
<223> n is a, c, g, or t

10

<220>
<221> misc_feature
<222> (367)..(367)
<223> n is a, c, g, or t

15

<220>
<221> misc_feature
<222> (383)..(384)
<223> n is a, c, g, or t

20

<220>
<221> misc_feature
<222> (391)..(391)
<223> n is a, c, g, or t

25

<220>
<221> misc_feature
<222> (398)..(398)
<223> n is a, c, g, or t

30

<220>
<221> misc_feature
<222> (400)..(400)
<223> n is a, c, g, or t

35

<400> 95
catgaaggaa naagcctgta ctanctgccg gtatccatgn taatctgngg ngatgtcagc   60

agacccagct nagcagatan ctncatttct ntctnaagnc ctttggtctg naggnngnca   120

40

ntnnanctnc ngntnaacat cacagctnct ccnagcatca ccctgctagn tancngnggg   180

ttttctctta tntgnngncn naacatctgc nngctctgnt annaanaatt ncataccgcn   240

45 canngtctnt gacgntgtga tgcatacgnt tgggcagagn gancaatang tgngcatatg   300

cgtgccttac ncaaggatac ggangngctt gaaattgatg ngaccaanan tttnngtacg   360

3305

gtaagtnacc caaccacttc tgnnttcact ntaagagncn   400

5   <210> 96
     <211> 800
     <212> DNA
     <213> Human

10

     <220>
     <221> misc_feature
     <222> (171)..(171)
     <223> n is a, c, g, or t

15

     <220>
     <221> misc_feature
     <222> (622)..(622)
     <223> n is a, c, g, or t

20

     <220>
     <221> misc_feature
     <222> (628)..(628)
     <223> n is a, c, g, or t

25

     <220>
     <221> misc_feature
     <222> (642)..(642)
     <223> n is a, c, g, or t

30

     <220>
     <221> misc_feature
     <222> (661)..(661)
     <223> n is a, c, g, or t

35

     <220>
     <221> misc_feature
     <222> (668)..(668)
     <223> n is a, c, g, or t

40

     <220>
     <221> misc_feature
     <222> (694)..(694)
     <223> n is a, c, g, or t

45

     <220>
     <221> misc_feature

<222> (709)..(710)
<223> n is a, c, g, or t

<220>
5   <221> misc_feature
<222> (735)..(735)
<223> n is a, c, g, or t

<220>
10 <221> misc_feature
<222> (751)..(752)
<223> n is a, c, g, or t

<220>
15 <221> misc_feature
<222> (763)..(763)
<223> n is a, c, g, or t

<220>
20 <221> misc_feature
<222> (778)..(778)
<223> n is a, c, g, or t

<220>
25 <221> misc_feature
<222> (782)..(782)
<223> n is a, c, g, or t

<220>
30 <221> misc_feature
<222> (786)..(786)
<223> n is a, c, g, or t

<220>
35 <221> misc_feature
<222> (788)..(788)
<223> n is a, c, g, or t

<220>
40 <221> misc_feature
<222> (798)..(798)
<223> n is a, c, g, or t

<400> 96
45 gagatgaatg atgaaatgat gagatgagat gatgaaatga aatggtgaga tgaactgatg   60

aaatgaaatg aaataatgaa atgaaattga aataaaattg aaatgagatg agatgaaatg   120

3307

atgagatgat gaaataaaat gatgaaatga gatgtgatga gatgaaatga ngagatgaaa   180

tgatgagatg agatgacatg aaataaatga aataatgaaa tcgaaatgag atgagaagat   240

acgagatgag atgaaatgat gagatgaaat gatgaaatga gataagatga aaagagttga   300

tgagatgatg agatgaaatg agatgaaaag agatgaaatg agatgaaatg aaatgatgag   360

atgaaatgag gtgaaatgaa attagatgaa acgtaatgag atgaaatgac ataatgaaat   420

gaaaaaatga aatgaaataa tgaaatgagg tgaaattaaa tgagatgatg aaattaaatg   480

atgaaatgaa ataatgaaat ggaaatgaaa tggaaatgat gagatgaatg atgagatgaa   540

atgatgagat gagatgtatt gatgagagga aatgatgaga tgtaatgaaa tgagatgaaa   600

tgaatgagat gaaatggaat antggaangg aaattgattg gngatttgag atgaaatgag   660

ntaaatgnga tgaattaatg atgagatgaa atgntgaatg ccggggtgnn tgagatgaat   720

tgagttgaac cctgngatga atgaagattg nntgaatggt ggntgaatgt tgaatggntg   780

gntggnanaa tgcctgtngg   800

<210> 97
<211> 334
<212> DNA
<213> Human

<400> 97
gatgaattga aatgaaatga aataatgaaa taatgaaatg agatgaaatg aaaagaaatg   60

atgaaatgat attgaaatga aattgaaaga tgagatgatg agatgaaatg gtgaaatgtt   120

gaaatgaaat gatgaaatga atagatgtga catgaaatga gctgaaatga tgagatcaaa   180

tgaaatgaaa tgagattaaa tgatgagatg aaaactgatg aaaacttaaa tgatgaaata   240

atgaaatgaa aatgaaatgg aaatgatgag atgagaagaa atgatgagat gagatgagat   300

aaaatgagat gaaatgatga gatgaaatga tgag   334

<210> 98
<211> 100

<212> DNA

<213> Human

<221> misc_feature

<222> (17)..(17)

<223> n is a, c, g, or t

10 <400> 98

ttcaggccgt ctgcttntac atatactatc gagaatggtg ctgtgcactc ataacaccgt   60

tgcttggtag acgcttttga acccttcagc gctgaaagta   100

15

<210> 99

<211> 500

<212> DNA

<213> Human

20

<220>

<221> misc_feature

<222> (8)..(8)

25 <223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (361)..(361)

30 <223> n is a, c, g, or t

<400> 99

cccgggantt cggcccttat ggcccggggga aatgatgaga tgaaatgatg aaatgagata   60

35 agatgaaaag agttgatgag atgatgagat gaaatgagat gaaaagagat gaaatgagat   120

gaaatgaaat gatgagatga aatgaggtga aatgaaatta gatgaaacgt aatgagatga   180

aatgacctaa tgaaatgaaa aaatgaaatg aaataatgaa atgaggtgaa attaaatgag   240

40

atgatgaaat taaatgatga aatgaaataa tgaaatggaa atgaaatgga aatgatgaga   300

tgaatgatga gatgaaatga tgagatgaga tctaatgatg agaggagatg atgagatgaa   360

45 ntgagatgaa aagagatgaa atgagatgaa accgaaatga tgagatgaaa tgaggtgaaa   420

tgaaattaga tgaaacgtaa tgagatgaaa tgacataatg aaatgaaaaa atgaaatgaa   480

ataatgaaat gaggtgaaat   500

<210> 100
<211> 397
<212> DNA
<213> Human

<220>
<221> misc_feature
<222> (8)..(8)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (39)..(39)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (50)..(50)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (56)..(56)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (71)..(72)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (97)..(97)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (110)..(110)
<223> n is a, c, g, or t

<220>
<221> misc_feature

3310

<222> (177)..(177)
<223> n is a, c, g, or t

<400> 100
cccgggangt ttaagttagg gggcctgccc ctttaagcnt agtcccaccn tgaaanacac   60

tccccttgaa nntctctaaa ccttaacttt ctggccnttt tgtttcagan atgcctaacc   120

ctcagggggt cttttgttct ctacgcctaa aaacttaatc tgtttggaac aattccnttt   180

cctctctgta gaaattgacc tggccatggc tcctgtgaat gatacggttg ctattatccc   240

tgaacactgt aaaaatgaac tttgaaacag ttgggtagga cccaaacaga aaatgatgta   300

tggcttggaa atagtttagc tgaacattat gctttaatat tttactggcc attgcagcac   360

aggtttagaa atttatgttc ggctttttaa agtttta   397

<210> 101
<211> 132
<212> DNA
<213> Human

<220>
<221> misc_feature
<222> (121)..(121)
<223> n is a, c, g, or t

<400> 101
gttacctaat gttttactct cattttcttt ttctttattt ttcatttgta aaataggaac   60

attaattgta ctactttcaa aagaattaat tgaagaaaga gagatacagg gtatctaggc   120

ngaggaagac cc   132

<210> 102
<211> 246
<212> DNA
<213> Human

<400> 102
gggggcttta gttataactg ggctaagcat aattgcgcta ccaattccat attatctcat   60

ggcacttaat tttataattg atatatataa taaaaaattc aatgcagata ttgatataat   120

3311

aaaaatagat aatggtaatc caagcacgat ggtagccatc actctaattg ctttgggggtt   180

aacctataac ttattaagta aagtgccaga atggttcttt gacagtatta aaattaaaga   240

aaacag   246

<210> 103
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> forward primer of exon 1 of insulin gene used for quantitative
      RT-PCR analysis

<220>
<221> primer_bind
<222> (1)..(18)

<400> 103
gccctctggg gacctgac   18

<210> 104
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> reverse primer of exons 1 and 2 of insulin gene used for
      quantitative RT-PCR analysis

<220>
<221> primer_bind
<222> (1)..(18)

<400> 104
cccacctgca ggtcctct   18

<210> 105
<211> 24
<212> DNA

<213> Artificial Sequence

<220>
<223> forward primer of ßMyHC gene used for quantitative RT-PCR
5   analysis

<220>
<221> primer_bind
10   <222> (1)..(24)

<400> 105
gctggaacgt agagactccc tgct   24

15

<210> 106
<211> 24
<212> DNA
<213> Artificial Sequence
20
<220>
<223> reverse primer of ßMyHC gene used for quantitative RT-PCR
      analysis

25

<220>
<221> primer_bind
<222> (1)..(24)

30   <400> 106
ggatccttcc agatcatcca cttg   24

<210> 107
35   <211> 20
<212> DNA
<213> Artificial Sequence

<220>
40   <223> forward primer of ANF used for quantitative RT-PCR analysis

<220>
<221> primer_bind
45   <222> (1)..(20)

<400> 107

ggatttcaag aatttgctgg 20

<210> 108
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> reverse primer of ANF used for quantitative RT-PCR analysis

<220>
<221> primer_bind
<222> (1)..(20)

<400> 108
gcagatcgat cagaggagtc 20

<210> 109
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> forward primer of APP used for quantitative RT-PCR analysis

<220>
<221> primer_bind
<222> (1)..(20)

<400> 109
ggatgcttca tgtgaacgtg 20

<210> 110
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> reverse primer of APP used for quantitative RT-PCR analysis

<220>

<221> primer_bind
<222> (1)..(19)

<400> 110
tcattcacac cagcacatg   19

<210> 111
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> forward primer of ZFP used for quantitative RT-PCR analysis

<220>
<221> primer_bind
<222> (1)..(21)

<400> 111
cacargagrc arggtcaacg a   21

<210> 112
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> reverse primer of ZFP used for quantitative RT-PCR analysis

<220>
<221> primer_bind
<222> (1)..(22)

<400> 112
ggattaaaat gaagcacccca ga   22